THE BEGINNINGS
OF
MODERN MEDICINE
IN
MADRAS

BY

D. V. S. REDDY

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THE DAWN OF MODERN MEDICINE IN MADRAS

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WITH A FOREWORD BY

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SURGEON-GENERAL WITH THE GOVT. OF MADRAS

CALCUTTA

THACKER, SPINK & COMPANY (1933) LIMITED

1947

FIRST PUBLISHED IN 1947
BY THACKER, SPINK & CO. (1933) LTD.
THREE ESPLANADE EAST, CALCUTTA

Price Five Rupees

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In Novembor, 1944, Professor Sigerist, the Director of the Institute of History of Medicine of Johns Hopkins University, Baltimore, visited India and in the course of my interviews with him urged me to publish some of my manuscripts. Col. D. P. McDonald, I.M.S., during his visit to Madras, in 1945, in connection with the inspection of Medical Libraries, gave a further impetus for another attempt for the publication of the book. The war was over and the paper position was showing signs of improvement.

Major-General Huban evinced great interest in Medical History. He gave his hearty support to the idea of organising a Medical History Society in Madras, which he actually inaugurated before he left Madras. I am most grateful to him for all the encouragement and help he gave me in the publication of this work, and especially for writing a foreword.

Arrangements for printing the volume, negotiations with the Publishers and printing presses also added to the difficulties and delays. I must acknowledge my appreciation of the spirit in which Mr. B. Nagi Reddy, the Proprietor of the B. N. K. Press, offered to help me in printing the book, under the most difficult conditions in Madras.

In spite of sad neglect, delayed and difficult labour the baby has been very fortunate to be born on this auspicious day to breath the fresh air of Freedom and behold the Tricolour Flag on Fort St. George.

Madras,
15-8-1947.

D. V. Subba Reddy.

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PROLOGUE

Medicine is as old as mankind. Archaeological and literary evidences indicate the existence of the Medical Art and Practice, even in the 3rd millinium before the Christian era, in Egypt, Assyria and India. Among the European nations, the Greeks were the first to evolve a rational system of Medicine. Hippocrates, a Greek Physician of the 4th century B.C., cleared the older cults of the cobwebs of superstition and speculative philosophy and created the Art of Medicine, based on clinical observation and reasoning. He is honoured as the Father of Medicine, by the European writers. In the 3rd and 2nd centuries before Christ, Alexandria became a great centre of Medical learning. For the first time, Anatomy and Physiology were studied on the human body, both by dissection and by observation. During the Roman times, Greeco-Roman scholars compiled the extant knowledge. Celsus was one of the most famous of these writers. Galen was the greatest of the Roman Physicians. He dabbled also in Anatomy and Physiology. His learning was so vast and his method of presentation so dogmatic that his books were treated with respect and veneration for centuries.

After the fall of the Roman Empire, Europe was plunged in darkness. All learning and scholars sought shelter in Byzantium and the Arab countries. The Courts of the Kaliphas, patronised all learning, East or West, Art or Science. The works of Hippocrates, Galen and of many other Greek and Roman writers were

studied in their originals, translated into Arabic and prescribed as texts. Ancient Indian Medical classics like the works of Charaka, Sushruta and Vaghbhata were also studied, translated and used as texts. Very soon, the Arabs themselves made many contributions to Medicine and great clinicians like Rhazes, scholar physicians like Avicenna and surgeons like Albucassis wrote famous books. When Europe was emerging out of the darkness of medieval ages, a few itinerant European Scholars took back with them some of the Medical classics of Greece and Rome in Arabic translations and also the works of the Arab Masters of Medicine. The early Universities of Europe, Salerno, Bologna, Montepllier, got their inspiration from these scholars and texts. The lamp of learning was again lit in Europe from the sparks from Arab countries.

Italy, France and Germany throbbed with new life. The Great classics were printed and read. But observation had no place in the Universities or in medical practice. To doubt the wisdom of the ancients or question their accuracy was to court trouble, if not death, in an age that had persecuted Copernicus and Galileo.

The stage was set for a medical revolution, to blow up old temples, and old thrones. The earliest of these medical revolutionaries was Paracelsus, who publicly burnt the works of the Ancients. Discarding the custom of the day, to lecture in the dead languages, Greek or Latin, he started teaching in the language of the land and the people. Times were ripe for the birth of Vesalius, one of the greatest figures in the history of

CHAPTER I

Before the Foundation of Fort St. George (Madras)

SHIP SURGEONS AND FACTORY SURGEONS OF EAST INDIA COMPANY

The East India Company even in its early stages provided surgeons on their East India merchant-men. Two surgeons and a barber constituted the medical staff of every one of the ships sent out by the company in December 1600. Ralph Salter, surgeon to the "Red Dragon" (one of the four ships above mentioned) was paid £ 32 for furnishing the chest with "all kinds of necessities and remedies belonging to a surgeon to be used on the voyage." From the year 1612, when the company started its factories in India each factory was provided with a medical officer to look after the staff. In 1614, Surgeon-General John Woodall was nominated as the appointing authority for the Company's surgeons. He deserves to be remembered for many things, particularly, for an improved model of a surgeon's chest he devised and for the preparation of a small, and, perhaps, the much-needed manual, entitled "Book on Surgery for East India Voyages". About 1619, Richard Saunders was surgeon at Surat Factory and a request was made for a surgeon-extraordinary at the same place. The embassy of Sir Thomas Roe originally contained two

surgeons on the staff. It is however evident that there were long intervals when the English factories had no medical help, as, for instance, when one surgeon died and another had to come from England.

Many were the tribulations and sufferings of the sailor or trader coming out in the service of the Company.

"Not the least draw-back of the soilor's lot" says Foster "was the absence of any proper treatment in the case of disease or bodily injury. The science of medicine was comparatively in its infancy and over the graver maladies the physician could exercise little or no control: when therefore scurvy or dysentery appeared on board during a long voyage, the seamen died like flies. Still worse was the lot of those who were wounded in battle or injured by accident. Even on shore in the hands of a skilful practitioner an operation was an ordeal to be dreaded by the bravest. On board the ship, where the surgeon was generally a raw hand, meagerly equipped, it must have been appalling beyond imagination and many a badly wounded man flung himself overboard rather than undergo the well meant torture."

There seems to have been great mortality in the fleet while scouting round about Masula in 1619. Kerridge made in 1620 a shrewd observation about the high mortality in Indian seas. "Whether eating of flesh or excessive drinking of toddy do destroy most of our mariners is doubtful, but one of them it is seeing the ships which go for Persia find no such mortality."

The general policy in providing medical aid to the Company's servants is adumbrated in a letter dated December 9th 1637, written by President Fremlen and Council at Surat, to the Company. "As they have so many vessels employed, it is necessary that they should be furnished yearly with a 'chest of drugs' and 'chirurgery ware'. They need an able and judicious chirurgeon for this factory (Surat) who may also distribute drugs to the various vessels and check their disposal. If more and better chirurgeon mates were employed on great ships, they might be utilised in small vessels when they could be spared."

We get a further glimpse of the actual conditions and the constant endeavours to improve matters in a letter dated 19th December, 1640, from President and Council to the Company.

"Urge therefore that men and materials should be supplied from England to keep vessels in action. Some of them should be carpenters, smiths *etc.* and some extra surgeons' mates should be sent to keep them in health...George Septon, surgeon of the Thomas who was to have gone to England in "Crispiana" is dead; Richard Vincent is therefore to be sent home in that ship. William Pearce, her present surgeon is to take his place at Surat. Stephen Ward has been transferred from the "Supply" to the "Michael" so that for "Supply" and "Francis" we have no better man, than a chirurgeon's boy, who hath scarce skill enough to bleed a man. This lack of medical assistance makes the seamen disheartened and unwilling to

serve you in those more unwholesome countries whither your occasions carry them."

The first reference to any English surgeon who landed on the Coromandel Coast occurs in the correspondence for the year 1621. Methwold writing from Masula to the President at Surat refers to the English surgeon who escaped from Macao and brought news of the lost ship Unicorn. This barber-surgeon belonged, according to Purchas, to one of the two ships, Unicorn or Royal James. He was among the crew captured by the Portuguese and imprisoned at Macao. That he must have been a successful surgeon is clear from the cures he effected. "In medical services to the daughter of the Governor at Macao, this surgeon was set at liberty and made his way to Masulipatam in May 1621". How much do we yearn to know whether he simply passed through Masula or practised there for sometime! And what was his name? About 1630, the English at Masulipatam wrote to the head factory at Surat asking for two surgeons, one for Jambi and another for Bantam—both subordinate to Masula. The first surgeon on the Coromandal Coast whose name has been recorded was one John Clarke appointed to the Fort of Armegon (in Nellore District) in November 1630. He was probably at Masulipatam for some time. A consultation held at Bantam on 11th June, 1635, refers to "John Clarke, lately arrived from Masulipatam, engaged as a surgeon here for three years at sh, 50 per month." A letter quoted by Saintsbury also shows that there was a surgeon at Masulipatam in 1632.

A distinguished surgeon, Edward Elcock, seems to have been stationed at Masulipatam for a while before he was sent to Bantam and later to Surat. Agent Pinson aboard the "Blessing" at Masulipatam wrote to President Methwold and Council at Surat on 26th September, 1637, "Edward Elcock appointed surgeon for Surat was last year, owing to the accident to Captain Mathew Wills sent from Masulipatam to Bantam in the "London." He has now returned and sails in the "Blessing" to take up his appointed post." A later consultation held by President and Council on 4-1-1639 aboard the Ship Mary at Surat refers to the retirement of Elcock having expired his covenant. He was relieved by Richard Vincent and took passage in May. "He is a very able man in his quality."

Another surgeon is mentioned in a consultation, held by Messrs. Cogan and others on 19-10-1639, at Masulipatam. George Septon was made surgeon for the voyage of the ship Thomas sailing from Masulipatam on the 25th October 1639 bound for Bantam, carrying a number of passengers, including Ivy.

According to one version of the story Gabriel Boughton, the hero of a modern legend and surgeon to the ship Hopewell, also came to Masulipatam on his way from Madras coast to Bengal, about the year 1636. It was perhaps the memory of his short visit as well as self-interest that made this Factory offer a Peshkush to Boughton in 1651, when he was the surgeon to the Moghul Viceroy.

A surgeon formed one of the paty that accompanied Francis Day on his first voyage to Madras, from

Armegon. Andrew Cogan, Francis Day and others at Masulipatam wrote to President and Council at Surat on 14th October 1640, expressing their thanks for the promise of "Chirurgery ware" and an expert man to administer them. They also added that they welcome either Adams or Powell, if no abler surgeon could be sent.

It seems fairly clear that 3 grades of medical men were available according to the importance of the ship or the factory. The highest type, the trained chirurgeon was available only at certain important localities or on occasions. Sometimes, there was only a physician like the "Scottish physician", Stracam, who was later replaced by a Chirurgeon. At the smaller factories, an apothecary was deemed a sufficient provision. Among the records of the voyage of Capt. Waddall's fleet we read that on March 3rd 1637, it was decided to have a factory at Bhaktacal (West cost) and that the establishment was to include an apothecary. Thirdly, there were the ordinary type available on small ships and at lesser factories, the 'Surgeons' mates' in whose hands were left the health and life of sailors and factories.

DRUGS AND DOCTORING

We get occasional glimpses into the principles and practice of medicine of these early days. The medical chest of the ships contained in 1600 "all kinds of necessities and remedies belonging to a surgeon" and costed from 17 to 30 pounds to equip. One also hears

that these chests carried about the year 1614 "Drugs rotten, unguents made of the kitchen stuff". Somewhere about 1621, factories in India were advised that "India had drugs in far greater quantity, plenty and perfection than here and that they should buy these in India." In 1621, the E. I. Co., resolved to send "three hogheads of red wine to ships as red wine was very useful and physical for men with fluxie (Dysentary)." The court minutes of 1618 had already recorded a remarkable medical opinion. "The court being made aquainted that wormwood beer is very excellent, wholesome and sovereign for the preservation of men's health at sea and yet no charge or very little to the Company, they appointed Mr. Mounteny to take care that two hogsheads for each ship be prepared and put into them for their uses." The factory at Surat, writing to the commander of an India merchant man in 1630, says "Your surgeon's diet of burnt urine to men sick with fluxie, is, by the physicians of this country, held rather poisonous than curable, which some of us in our experience have found true." There is also record of a curious observation made by President Methwold in 1636. "Drugs being far fetched and long kept, applied by a skillfull hand without the consideration of Man's body by the alteration of climates they peradventure produce small or contrary effects and therefore we, for our part do hold that in things indifferent, it is safest for the Englishman to so comporting himself in some manner to the diet of the country; the ordinary physic of the country will be the best cure when any

sickness shall overtake him." President Fremlen went further and wrote in 1638 "A surgeon is unnecessary as fevers and fluxies, both in India and Persia are most familiarly cured by the natives of each country to whom nor means nor skill is wanting." He refers to "physic, unguents or plasters" in the store at Surat.

"HOME-STORES" AND OTHER DRUGS

Three different types of indents for medical and surgical requirements of the ships or factories can be distinguished. The smallest or modest indent requested a supply of medicines, as Thomas Byam, aboard Michael in Swally Road, wrote to President at Surat on 30th March, 1636. Sometimes, packets containing books, wine and physic were sent by caravans. It has been noted that in 1637, President Fremlen asked to be furnished with a yearly supply of 'chest of drugs' and "Chirurgery ware." The full list of articles contained in a chest of drugs is not available. On the other hand, some clue is afforded to the contents of the chest of surgery by a passage in a letter dated 27-11-1640 from Andrew Cogan and others at Masulapatam to the President and Council at Surat. "Out of ship Hopewell we took 3 of the 4 chests of chirurgery sent forth for the supply of those that wanted; one of which was put ashore in Madraspatam where till then was not so much as a playster or wherewithal to make any; another we took ashore here; and a third was put aboard the Expedition. But if you shall be pleased hereafter to send us a chirurgeon, he must bring

somewhat with him, for this chest or rather box, was pillaged of all what was good or eresent ashour".

The native aristocracy had begun to appreciate the virtues of at least two drugs often sent as presents by the English Factories. Strong liquors were reputed to be of great medicinal value. Shah Jehan is reported to have written to the English Governor at Surat in 1640 asking for grape wine and the English sent him 2 cases filled with Canary wine. The other acceptable present was a jar of China roots. In 1636, Governor Methwold sent as presents to Asaf Khan two jars of China roots and to Afzal Khan two jars of China roots. Coffee and Tobacco had already found entrance into the homes and hearts of men and women in India and were believed to have great medicinal virtues in many ailments.

Finally, attention may be drawn to two items of trade, having special value to the medical practice of the day. Pulicat factory wrote to Masula in 1622 mentioning the "Charges for China Roots" This is the root of a species of smilas used a Sarasparilla even today for "impure blood", sometimes an euphemism for syphilis. But the chief medicinal product of Coromandal and Golkonda at this time was the famous Bezoar stone. Methwold sent in 1620 Bezoar stones through George Ball to Jakatra. He also brought some "Bezoar stones, some for 24 rials (Rs. 48) per seer (12 oz.) and some dearer". Bezoar stone was a very important medicament in the 17th century as an antidote against poisons, a cure in infections and an amulet. Roe, Tavernier and

Manucci seem to agree that Bezoar stone was found in what is now called the Kistna District. Jehangir also relates that an Afghan brought from the Carnatic 2 goats that had the "Bezoar stone".

EXTENSION OF MEDICAL RELIEF TO INDIANS

The new science of medicine from Renaissance Europe was affording relief not only to the servants of the Company but also, to the humble Indian neighbours of the English Factories or the aristocratic friends of the Company. Robinson stationed at Ahmedabad wrote to President and Council on 17th March 1636 "for Medicines, wanted for a native with sore eyes." A reference to a historic operation, the first description of a major operation by an English Surgeon on an Indian and as a purely humanitarian service, occurs in Methwold's Diary (August October 1636). "A young brahman about the age of 14 years washing himself in the river not far from the customs house, a fish or crocadile (I rather conceive a shark) sheered off his right arm in the middest betweixt the elbows and shoulders; who being the only child of his mother, a poor widow I commanded the surgeon to undertake the cure for God's sake; who sawed off the bone being shattered and clipping off some torn flesh and then applying such powders and other means as the case required; he bound it up very hard to stop the bleeding all which the boy endured with man-like patience." The memory of such men as President Methwold and Surgeon Robert Surtees of Surat Factory

should be perpetuated and honoured by Indians and Englishmen alike. Another strange but tragic story is hinted by a letter dated 28-1-1640 from the President Fremlen at Swally Marine to the Company. Joseph Martin, a surgeon in the company's service was sent to cure the Governor of Tata (in Sind) of a malady but the surgeon himself died a few days after his arrival, a martyr to the exigencies of professional service.

Even before the English opened on establishment at Madraspatam in 1639, "British Surgeons has acquired for their skill, a reputation which made them known at the Moghul Court." Asaf-Khan applied to Surat requesting a Surgeon to be resident at Agra.

CHAPTER II

Early Days of Fort St. George

The earliest settlement of the East India Company on the Coromandal Coast was started in 1611 at Masulipatam, then the chief port of the Kingdom of Golconda. The English built there a factory house (ware houses, offices and residential accommodation.) Later, due to the exactions of Golconda, the English sought a footing in the southern districts and obtained a grant of a piece of ground at Armegon (in Nellore District) where they built a Fort and Factory in 1626. Even here the English had their difficulties with the local Naik and in July 1639, when Francis Day was chief at Armegon, he was authorised to sail down the Coast and negotiate with the Rajah of Chandragiri for a new settlement. This search led to the selection, by Mr. Day of the site, adjoining Madraspatam. He later obtained from the above Naik, Damerla Venkatadri, " Lord General of the Carnatic", a grant of territorry and privileges and licence to build a Fort and form a settlement. On 3rd September 1639, Day handed over to the Agent at Masulipatam, a report of the transaction, along with the grant by the Naik, a firman engraved on a gold leaf. There was some delay in getting the approval of the Presidency at Surat for this new venture.

A SURGEON STEPS ASHORE AT MADRAS

Finally, in February 1640, Cogan, and Day, dismantled the fort at Armegon and embarked in the

ship 'Eagle' accompained by another ship 'Unity' They reached Madraspatam on the 20th February. The party accompanying Cogan and Day comprised Factors, Writers, a Gunner, a Surgeon and 25 soldiers. It is not clear whether the Surgeon mentioned was the one stationed at Armegon or the ship's surgeon. There are entries in records suggesting the presence of a surgeon at Armegon, at least occasionally, as early as 1630. The report or relation of Joe Carter, Captain of the ship 'Eagle' (which remained at Madras road for sometime and was hit by a storm in the 2nd week of March 1640) mentions that his chief men including the Surgeon were ashore at Madraspatam at the time of the gale. This would suggest that the Surgeon that first set foot on the soil of Madras, in 1640, was probably a ship surgeon. It will be highly interesting to know the name of this surgeon and some details about him. The same report mentions a few medical details; that some of the faithful crew were sick and others feigned sickness, during the storm, and that a man fell overboard with one of the top masts but miraculously escaped without an injury.

Travel back 300 years in imagination and conjure up a vision of the Coromandal Coast, at the spot now occupied by Madras. At a distance was visible a small steep hill, covered by the ancient church of St. Thomas. Adjoining the shore, was the fortified town of wealth and importance and an early settlement of the Portuguese, San Thome in Mylapore, three miles north of which rose a small hamlet, even then known as, Madras-patam. All

the rest of the Coast, was a strip of sand or low sand hills, except for a small lagoon, formed by the mouth of the river, now known as Cooum.

Slowly, people were persuaded to settle down around the Fort, and even some Portuguese from San Thome, migrated to the new settlement. By 1640, besides a number of Portuguese from Armegon, there were three or four hundred families of weavers in the adjoining area. About the year 1641, the Garrison of Fort St. George consisted of 35 Englishmen and as many natives.

It was about this time that the factors on the Coast, wrote to Surat stating the receipt of the first chest of surgery for Madras and also asked for a surgeon for the coast. "Out of the ship 'Hopewell' we took three of the four chests of surgery sent forth for supply to those that wanted; one of which was put ashore in Madraspatam, where till then, was not so much as a playster, or wherewithal to make any; another we took ashore here (Masulipatam) and a third was put aboard the ship, 'Expedition'. But If you shall be pleased hereafter to send us a chirurgeon, he must bring somewhat with him, for the chest, or rather box, was pillag'd of all what was good er(e) sent ashore."

FIRST MENTION OF A SURGEON AT MADRAS

It is a bit uncertain whether, in 1643, the establishment at Fort St. George, did have on the staff Surgeon. But a letter dated 20th January 1644, from Fort St. George to Bantam, describes a most unfortunate

incident that happened on the 8th of that month and refers to 'our surgeon'. An English sergeant, named Broadford killed one of the natives, not intentionally but by accident. The man was at a most unseasonable time hiding around about the sergeant's house. 'Hee by accident finding of him did so, and in the darke seizing on him, and the other struggling for an escape; which the Sargant doubting, drew out his knife, not haveing his Sword about him, and cutt him over the Arme, so far to give him a Marke for to Discover and knowe him the next day. And indeed itt proved soe that the man was easily to be found, for what with timerousness and neglect to have his blood stinched, he proved a Corpoes. Wee, having noticed of the Disaster the next morning, and being dubious that our Maters might suffer somewhat, first sent our *Chirurgeon* to see what wounds; which was fruitless, for his Parents had intered him early in the morning, being ashamed of the act, for such were his words...'

The establishment, in October 1645, consisted of "37 of soldiers and other professions". There is no definite and separate entry regarding a surgeon. But there was much sickness, as another letter to the Company adds, "What can you expect of 50 well and sick men to defend your Estate and fort against King's power".

In October 1645, was also issued the first medical certificate by the Surgeon at Madras.

"Wee have by yure appointment Bridgman purser of the Advice, and returned him to Bantam with

William Browne, one of master Donwlls accusors; and should likewise have sent Jeremy Roote, had hee not been at deaths dore at the departure of the shipp: which if wee had sent him Aboard, wee must have hazzarded his life, as per attestation here enclosed under the Chirurgions hand. And if it please god to restore him to health, he shall take his passage for Bantam upon the next shipp......".

An entry dated January 1647 alludes to famine and pestilence, that ravaged the vicinity of Fort St. George.

"The Famine is so great in this Kingdome that wee believe it will be the Destruction thereof, for there hath not fallen any rayne this years for the increase of any graine to relieve the people: and now the season of the Raynes are past, so that, if the Allmighty does not send supply from other parts, the Country will be so Dispopulated that it will be unpossible to recover it selfe againe in five years time. Likewise we could intreate you to supply us with tenn Englishmen to serve here as soldyers, for Mortality and Moores Campp hath taken all away to 25 persons, whereof 4 or 5 are continually sick with the miseerie of the time; for we have not, nor is here anything to bee bought to relieve any sick person, unless hee will Eate Carryon beife, which wee procure out of the Moores Campp, which we obtaine by much favour.'

THE EARLIEST SURGEON KNOWN BY NAME

It is in the consultation of the latter half of 1650 that one come across the name of a surgeon for the first time, since the foundation of Fort. Edward Whiting.

who had been surgeon at Jambee (Bantam) from 1645, arrived at Fort St. George. "It shall bee our care providently to dispose of both medicines and instruments in the Chirurgery Chest, rendering our humble thanks both for it and the Surgeon Edward Whiteinge, at whose arrival Nathaniell Lumly lay very sick, and the 7th October last departed this life without makeing any will in this place........."

The year 1654 was a sickly time. "We have had a very unhealthful and sickly tyme amongst us ever since Christmas last; hardly a men that hath not beene visited more or lesse, some of us 4 or 5 tymes over. We have buried only 8 of our souldiers, and their Captain James Martin, who after a long sickness left this world the 22nd June past." Hence the following request. "When it shall please God to putt your Worships in a way of sending us out a ship for the Coast againe (which we hope will be speedily), wee desire you will be pleased to remember us with a fresh supply of Chirurgery means, whereof we are in extream want, having neither Purge, Cordiall, or any the least thing elce left us in the Chest we now have by us, what need soever may happen to us.........."

By this time, the surgeon found an honourable place and mention in the list of men resident at Fort St. George, as there is an entry dated 1654, "Edward Whiteing, Chirurgeon". An interesting passage about the Chirurgeon, refers to a duel he was challenged to fight. Henry Greenhill complained that James Martines, Captain of soldiers "sent a private challenge to our Chirurgeon

Whiteing, even at the time when sickness was most rife amongst us." Whiteing is also mentioned as being an occasional companion of Leigh, during the latter's quarrels with President Baker, in may 1654.

"This Leigh hath been known to be drank near upon a month together, and that drawne others of the Company servants to accompany him in his drunckness, in soe much and it is verily believed, that Mr. William Gurney and Mr. James Moore were thereby brought into such diseases as helped them forward to their fast ends........."

There is also a medicolegal report in that year. Thomas Bland charged his wife "of making away a child which we find by her speeches, was gone with 5 months".

Whiteing left India in 1657, Henry Greenhill wrote to England in January 1657, bitterly complaining of lack of medicines; "Tis now more than 4 years since we received any Chirurgery measure, nor do we expect any et awhyle, for these ships will spare us none what ever should happen; and being neglected by your Worships from whome we might justly expect releife and Comfort, and your people discouraged...; but hope that time will one way or other releive us of this dropping condition. In the meantime, please to take notice that, upon the request of Edward Whyting, our Chirurgeon, we have granted him lycense to repair to his Native countrey; for to what end should wee keepe him here upon charge, having not wherewith to imploy him"

The list of men in Fort St. George at the beginning of 1658, contains the name of a surgeon. The entry reads: Robert Cooper, Chirurgeon. It is believed that Cooper was one of the factors recalled from Pegu.

THE FIRST RECORD OF AN OPERATION IN MADRAS

The first surgical procedure recorded in the Annals of Fort St. George, "Tapping", was performed in the first week of 1659, on the Agent Greenhill. "2 days past, per hands of the Dutch we had the Sad news of the Death of our Agent Greenhill, which (per the Circumstances) we feare to be too true. They say hee, being very much sweld was persuaded per the Surgeons to be tapt, to let out the Beaveridge, after which he lived but 2 dayes. Its an ill wind that blowes noe body good; per this our friend Thomas a Ginger will bee Exalted into a better Capacity of serving his friends."

"SICKLY TOWN"

Beriberi appears in the Fort St. George Records in 1660. "In his stead, we placed Mr. William Hull, who hath since ended his dayes of a languishing sickness commonly called the Barbeers."

There was also much sickness, illhealth and mortality in the 'white Town'. "The Roman Catholiques have one (church) that stands in the heart of the Towne, where they have likewise a churchyard to bury their dead; whilst we are forc't to carry our dead Corpses out of the Towne. Besides, there are so many of their Pittifull

Christians dye of fowle diseases that in time of heates it is enough to Breed Infection. I am certain the smell is very noysome to them that live neere the burying Place." "In the second place, if any Christians belonging to our Congregation are visited with any sickness, they (The Catholics) will be soe bold as to intrude into our Ministers Office of Visiting them. And this they doe in the night, for our sick men are forced to lye out of the fort for want of Accommodation."

FOLK MEDICINE

Belief in witchcraft is clearly indicated by the following passage from the charges made by Greenhill in January 1655. "I shall in the first place rank their Witchcraft, Sorcery, Spells, Medicines in Meate and drinks *Etc.*, which they ditto Brahminees are reported to use; and amongst others to the purpose, had procured a woman Exorcist or Divinatrix, one of Balaams Cast, to curse their Enemies, whoe remain'd doing in their howse, untill by the perswasion of Verona, their Cozen, shee was lately sent out of Towne. That such practises are usually in India, too many of the company's Servants have found true by sad experience, nor have your selfe, Sir, bin exempted forme(r)ly from the like in Bantam. And whoe knowes that mischiefe such villaines now may here work upon you for their own ends, having all opportunities to Minister, by themselves or Instruments, what they please, by whose Councells you are swayed to our Nations and Masters exceeding dishonour and prejudice." How the brahmin brethern learned sorcery is mentioned

in another chargesheet. "In this Towne, before the Pagod Permall, the Brahmines Caused a little Pagod to be built, and procured a Sorcerer or Wich, whom they kept heere 2 months and learnd his Art: by whose Charmes and Spells, done upon a Brass plate which they buried under the Stone Idoll in the little Pagod, Like accons are said to bee done to obtaine the Affections of Governours, abase and destroy or hinder the proceedings of adversaries; and Wee doe affirme that they determined the Destruction of the Towne; and such actions in these parts are punished with Death..." What they did is thus described: "The Brahminee Vincaty procured that Surva Raz, one of their kindred, was made Adigar whoe in the tearm of 2 or 3 Months falling out with him...threatened that hee would accuse Vincaty of Some Accompts or misdemeanors; but its reported they poysoned him or Murdered him with witchcraft, for soone after, hee dyed suddainly..." The brahmin brothers in their counter charge against Greenhill mention a barber surgeon of Madraspatam. "In Rudriga's howese, two poore beggers about difference in their seets fell out, and beat one the other. The weakest, or one of the two went in and complained to Rudriga; whoe came with a Rattan, and without questioning the matter, strooke the askeman, whoe thereupon cutt his owne throat. For which was no Justice done; and Vincaty gott Dick, the Barber, to cure him againe".

CHAPTER III

The Origin of the Hospital in the Fort

THE NUCLEUS

The foundation of the Hospital was the logical outcome of the anxiety of the East India Company to safeguard the health and lives of its employees. Certain conditions, however, partly local and partly seasonal, brought matters to a crisis, forcing the authorities at Fort. St. George, to take immediate steps to start a Hospital. Towards the end of 1664 (10th November 1664) when Sir Edward Winter, the agent for the Government, was visiting Masulipatam, Gifford and Sambrook wrote to him reporting the establishment of a Hospital at Madras. "The soldiers in the Fort hath bin something strictly held to their duty and according to your order they had no free guard so that the fresh soldiers who came this year, taking up their habitation in the bleake winde in hall, fell sick. Four of them are dead, about 10 remain at this time very sick and complain (and not without reason) that their wages are not sufficient to supply them with what is necessary in the time of sickness. So, rather than Englishmen drop away like doggs in that manner, for want of Christian charity towards them, we have thought it convenient that they might have a house on purpose for them and people appointed to look after them and to see that nothing comes into them, neither of meete and nor drinke but what the Doctor alloweth. And have for that purpose

rented Mr. Cogan's house at 2 pagodas per month; which we hope you will so well approve of as to continue it for future." Sir Edward Winter, during whose regime as Agent, an impetus was given for the development of useful instituions like Chapel, Hospital and Library, makes an illuminating comment in a letter written to his brother in England on the average number of patients in the newly started hospital. "Yet we have so little housing that we are forced to hire rooms for sick men, 8 to 10 being down together." It is not improbable that the average number of patients in the Hospital at the time was about 8 to 10.

THE FIRST HOSPITAL BUILDING

Records now available are either silent or give only scanty information, regarding the details of working or the development of the Hospital during the first decade of its existence. The captains of the Ships and the Military officers surveyed the fortifications and buildings and submitted in January 1679, a report on the state of buildings, and their immediate requirements. "The Hospital being a small place and too little room for accomadation of sick men, it requireth to be enlarged 3 or 4 rooms." Whether the building which so needed extension was the original rented building (Cogan's House) or a different one, cannot be conclusively determined. The outcome of the recommendation of the officers is, however, well known.

A large square doublestoreyed edifice in the Church street, close to the St. Mary's Church, was planned and

built by public subscription. From all descriptions, this building, specially designed as a Hospital, appears to have been a commodious and handsome structure, completed about the year 1680. Lockyer's description of the building as it stood in the first decade of the 18th century, may be quoted here, "College is the name for an old Hospital; it formerly was such, though at present it is the residence of 7 or 8 hopeful youngmen.........The building is very ancient, two storeys high, has a paved court, two large verandahs or Piazzas and about sixteen small rooms within it." The building seems to have had a Gate, guarded by peons. The Hospital provided accommodation for sick soldiers and seamen and was under the sole management of the Church Wardens of the Parish. It would appear to have been very popular as the records refer to the "great concourse of Company that frequent the Hospital."

When there arose some difficulty in providing accommodation for the ever-growing number of factors and writers in the settlement, the Government cast their eyes on the Hospital building, purchased it from the vestry for the cost price of Pagodas 838, and converted it into Quarters for the Junior Factors. Thenceforth, the building was known as the College. The following interesting extracts from original correspondence deserve to be printed in any history of the Hospitals in India. A consultation dated 22nd March 1688, contains the first record of this transaction. "The withdrawing several of our factorys having brought many of the Rt. Hon. Company's servants hither for whom havingno accommodation

in the Fort they are necessitated to lodge at public houses, which has been the occasion of their too great expense, and disorder and cannot well be prevented without some suitable lodgings be built or hired for them and there being a very commodious house built by the contribution of the town inhabitants for an Hospital to entertain sick soldiers and seamen, which lying so near the Right Hon. Company sorting godown and the great concourse of company that frequent the hospital, renders the Right Hon. Company goods in danger of being stolen which sometimes must unavoidably lye open in the godown yard, and the goods often lost thence has been suspected to go that way which cannot be better prevented for the future but by adding the hospital to the godown which the many lower rooms therein will be of great convenience and service for China and other sorts of fine goods, and the upper rooms for lodging chambers for factors and writers, upon which considerations, and of its being so many several ways convenient and safe for the Right Hon. Comp. Service, it is agreed and ordered that it be bought of the Parish for their account and that a new Hospital be built with the money at a more convenient place near the river side and Mr. Higginson, Mr. Fraser, Cap. Bett and the Church Wardens, do make a due survey and value of the said Hospital by the River."

In a report of a consultation held on April 14th, 1688, the next reference to the Hospital shows the progress of negotiations :—"The Gentlemen that were

appointed to the valuation of the Hospital, having surveyed, examined and estimated the same according to a paper now delivered in under their hands, and entered next after this consultation which is approved by the council, amounting to pag. 838.27.0 to be paid into the church wardens for the use of the parish and that the Right Hon. Company servants now destitute of lodgings and conveniences, be accommodated there and it is ordered that the said Hospital be cleaned and fitted for them accordingly."

The following is a further reference, wherein the Parishioners agreed to the selling of the Hospital. "Whereas the Parishioners of St. Mary, Fort St. George, in Vestry, assembled did unanimously agree to and with the Hon. Elihu Yale, President and Governor of Said Fort *etc.*, Council, for the selling the old hospital to the Rt. Hon. East India Company. Now, know ye that we the Minister and Church wardens of the Parish aforesaid, for the time being to and with consent of the said parishioners have bargained and sold into the said Hon. President *etc.*, Council for the use and behoof of aforesaid, all and every part of the said Hospital, (the utensils thereunto belonging excepted) with the yard, and all the out-houses and conveniences thereunto belonging for and in consideration of the summe of Eight hundred thirty eight pag. twenty seven fanams, which money we confess by these present to have received, witness our hands this nineteenth day of April 1688. Richard Eliot, Henry Mose, Charles Metcalfe."

TRANSFER OF THE HOSPITAL TO RENTED BUILDINGS

As the building had to be immediately vacated, the sick soldiers were transferred to a rented house in James Street in the Fort, as a temporary shelter, till the completion of new building by the river side.

It was about this time that the idea of the creation of the Corporation of Madras, was in the air. The charter granting the Corporation is dated Dec. 1687 and the Civic Body came into existence on 29th Sept. 1688. A perusal of the correspondence in which the Corporation asked for Funds to be allotted for works "for the ornament and healthfulness of place" and the note by the Governor 18 months later, demanding back the revenues allotted by the Company, as the Corporation did not erect as expected. "Townhall, School House, Hospital *etc.*," would justify a conclusion that a civil Hospital was originally intended to be built by the Corporation.

CONSTRUCTION OF THE NEW HOSPITAL

The site selected for the new Hospital was at the north end of the Barracks. The building was erected during Elihu Yale's term of office and was completed probably by 1690 and certainly not later than 1692, and has been described as a handsome edifice built like Barracks in the Tuscan style. The vestry expended on the new building the greater part of the sum they received for the old one and contributed as before, to the

upkeep. Yale himself seems to have advanced a further sum of one thousand seven hundred pagodas, the total expenditure on the building alone amounting to 2500 pags. Certain regulations were framed for the proper control of the Hospital. There seems to have been a laudable ambition to augment the financial resources of the Hospital, by every means available, as can be seen from the following order of Elihu Yale in 1692, securing a sort of compulsory contribution for the coffers of the Hospital "Neither they nor any of the officers to neglect it or leave the guard without due licence upon penalty of forfeiting a day's pay to the hospital".

Yale also incurred unauthorised expenditure on "A physic Garden" costing four thousand nine hundred and twenty-three pagodas (4,923 pagodas) as an appendage to the Hospital. Such gardens were esteemed absolutely necessary for any large Hospital in Europe of the latter half the 17th Century, just as a well-equipped Radiological Institute or Bacteriological laboratory with Sera and Vaccines or a Blood Bank is an essential limb in our post-war Hospitals all the World over.

In 1697, the Minister and Church wardens represented to the Council at Fort St. George that their expenditure exceeded their income. "They do yearly expend above forty pagodas for servants wages and repairs of the Hospital, besides which there is an annual charge of about forty pagodas for the provision of cloths and cotts for sickmen, whereof the church hath usually paid one third part upon which account the Paymaster having demanded of them fourteen pagodas they did

demur the payment till they had acquainted us with the condition of the stocks and doe further alledge that severall of the Inhabitants dow withdraw their contributions because they are disatisfied with the disbursement of the Church money for Hospital whereof the souldiers have the only use." The Council at Fort St. George responded:—"The Paymaster is ordered yearly to disburse the money for cloths and cotts and not demand any part thereof of the Church wardens." In a later consultation dated 8th December 1698, further consideration of the same question is recorded "Upon consideration of the Petition delivered in by the Ministers, church wardens & etc., in consultation the first instant, representing to this board the great charge they are at, in maintaining the Hospital which is wholly appropriated to the use the souldiers & etc., in the Companies service, Resolved, for the future that they are discharged from contributing thereto, and only to pay the charge of such sick persons as they shall send thither, and that hence forward the Chirurgeion or steward of the Hospital render a monthly account to the charge of said Hospital."

"Resolved that that part of the Petition in which they desire some consideration for building the Hospital which cost them Eight hundred pagodas be referred to the Rt. Hon'ble Company and that their Petition with the resolution of this board be remitted to their Honours by the first shipping, desiring their answer thereunto."

REORGANISATION OF THE HOSPITAL

As the Hospital grew in size and became increasingly popular, the council had to review the financial position with a view to effect some retrenchment. The work was entrusted to Dr. Bulkley who was eminently qualified for the task. On 13-1-1698 the Council ordered "the Charges of the Hospital running (very high) Dr. Bulkley is desired to consider thereof (and) make a report that they may be regulated, in dietting sicke souldiers for each of whom 3 fan a day is allowed, besides which the Stewards Account amounts monthly from ten to eighteen pagodas."

On the 4th August 1698, the council received a reply, "Doctor Bulkley having been ordered by consultation of the 13th January last to report a regulation of the charges of this Hospital, doth now deliver a paper of this date which was read and is ordered to be entered after this Consultation."

"Fort St. George, 4th April 1698.

The Rt. Hon'ble Nathl. Higginson,

Lieutenant General and Wopll. Council.

By whom it is ordered that a remonstrance be given of what is needful and convenient for the well carrying on the bussiness relating to the cure of the sicke and lame, belonging to the Garrison.

Persuant thereunto, I humbly propose that the surgeon of the said Garrison be allowed (at least) one

mate and one assistant with Dubash, conicoply and 4 coolies, also a yearly supply of Europe medicines to the amount of fifty Pounds, with allowance of as much Drugs and medicines procurable in these parts with stillastories Mortars & *etc.*, vessels and utensils necessary for the preparation of medicine. And because good and proper Diett is likely necessary, there ought to be a steward and servant belonging to the Hospital, for providing and takeing care of the same with cotts, Bedding and apparel &ca, and as to the charge of the Diette for the said sicke and lame, I thinke it may be supplied at the rate of four fanams per day for each person. This from

Sirs,
The Rt. Hon'ble & ca. Most Humble
and Obedient Servant,
Edward Bulkley.

P. S.

I hope it will not seem amiss or unreasonable that I also propose a convenient Dwelling house for the Surgeon of the Garrison (as customary in other places) or allowance for the same.

Your Hon'ble &ca,
as aforesaid,
E. B.

CHANGES IN THE SCOPE OF MEDICAL AID

By the end of 17th Century, many important changes in the administration and the scope of the Hospital, took place. Though the hospital was originally designed

for the use of the Garrison and men of the company's ships, its scope was now extended to other classes of patients also. On the question of administration the Company in London wrote to the following effect. "We are willing, for the reasons given, to excuse the church stock from paying 50 pagodas per annum, formerly allowed towards the charges of the Hospital and to bear all the charges thereof ourselves ; but to reimburse the first cost of the building in part or in whole, we cant find reasons cogent enough to persuade us thereunto. We are well informed there are public contributions and free will offerings given by our commanders for its first erection and it is, we think, sufficient that we now bear the whole burden of its repairs, salaries of Chirurgeons *etc.* and that the doors are opened to all truely necessitous patients, whether belonging to the Garrison or of the Town."

A DESCRIPTION OF THE HOSPITAL ABOUT THE END OF THE 17TH CENTURY

The hospital, as it stood at the end of the 17th century and in the beginning of the next century, is described or at least alluded to, by most of the visitors to Madras at that time. It may be safely concluded that even as early as 1700 the hospital had become one of the most valued institutions of the English settlements at Madras. Salmon, whose description is applicable to the year 1699-1700 notes: "Over against the west gate of the fort is a barrack, or rather one long room where all the company's soldiers are obliged to lodge

when they are off guard; and adjoining to it on the north, is a very commodious Hospital where they are taken care of, when they are sick." The same observant visitor adds perhaps the only available details regarding the type of the buildings in the English town:—"WHITE TOWN: The fort stands pretty near the middle of the White Town where the Europeans inhabit. This is an oblong square about a quarter of a mile in length, but not half so much in breadth. To the northward of the fort are three straight handsome streets, and many to the south. The buildings are of brick, several of the houses two stories high, by which I mean they have one floor above the ground floor. Their roofs are flat and covered with a plaister made of sea shells, which no rain can penetrate; and being secured with battlements, they take the fresh air upon them morning and evening. The walls of these houses are very thick, and the rooms lofty; but what seems peculiar to this country is, the upper floors are laid with bricks instead of boards; but there are not many of these lofty houses, and I question whether there be more than a hundred and twenty houses in the whole White Town."

Lockeyer, who served in Madras in the years 1702 to 1704, gives a more elaborate description of Fort St. George, "The Public Buildings are St. Mary's Church, College, New House, and *Hospital*, with the Governor's lodgings in the Inner Fort."

"The Hospital joins the New House by the Water-Gate to the Northward, is a long building, and has Piazza with a paved Court before it: at one end of the

court is the Plaister-Room, and at the other an Apothecary's Shop, where Medicines are prepared after the Prescriptions of the ingenious Dr. B——y. (Dr. Edward Bulkley). The steward provides such Victuals for the sick as the Doctor orders, and receives of soldiers their whole Pay, while under his Care; but they pay nothing for Medicines, of what Nature soever their Distempers are. Sailors pay for the Physick used in their cures and a Shilling a Day for the Steward's Trouble and Provisions."

CHAPTER IV

The Story of the Fort Hospital

(CONTINUED)

HOSPITAL OUT OF REPAIRS; PATIENTS SHIFTED TO A RENTED BUILDING

The next stage in the history of the Hospital is reflected in the consultations and despatches of 1711. "The Hospital and free guard house ready to fall; better should be rebuilt than repaired." "When St. Thomas point is done, shall go about the Hospital." A letter to England represented the need to build a hospital for sick soldiers and hire a house to lodge the patients, as the Hospital was ready to fall.

About the same time, the Hospital was overcrowded, as can be gathered from the following two extracts from Despatches to England. "Mr. Chadsley, Surgeon, dy'd the 30th May, Mr. Anthony Supplie put in his stead; *the unhealthy Season makes them want 2 surgeons, the hospital for 12 months past has had always 40 or 50 persons in it; wants 3 or 4 Surgeons Mates initiated in Anatomy and Physick* and sent to supply other Factorys: the Surgeon at Fort St. David is a freeman of Pondicherry and acts at present but will not be obliged to stay; a good man may be sure of that post."

"This present year has been very sickly; many Europeans and inhabitants of the Black town have dyed; for severall months have had 40 to 50 men at a time in

the Hospital. 21 Souldiers dy'd since the 10th July; must built an Hospitall or will all dye; the Surgeons commended."

On 8th October 1711, the Council recognised the bad state of the existing hospital and decided to provide a more convenient house immediately by renting a building. "The Hospital wherein our soldiers are kept being very much out of repair and our men daily falling down, agreed for the preservation of their healths that the paymaster take a convenient house for them during this monsoon". On 1st November 1711 Edward Buckley, paymaster, acquainted the Board that the sick men were removed out of the Hospital into a House hired for that purpose. It has not been possible to as certain where this rented building was and how much rent was paid.

INSPECTION OF OLD BUILDING; DECISION TO BUILD A NEW HOSPITAL

On the same day, the condition of the said hospital was taken into consideration and after full debate the question was put "whether it was not absolutely necessary that the hospital and guard house should be rebuilt from the grounds which we unanimously agreed to and will meet on Saturday morning next at the old hospital to survey the ground and in the meantime the pay master is ordered to be pulling down the old building."

Accordingly, on Saturday the 13th November 1711, the Governor and Council went at 6 o'clock in the

morning to review the buildings and made the following observations. "The Hospital, free guard house, and mud wall, that join in a range, of buildings, altogether were found upon survey, as has been before represented by the paymaster and surgeon, the walls being in several places crackt from top to bottom, the rafters of the roof rotten and ready to fall in, the whole so much out of repair that we are unanimously of opinion it is most for the Hon'ble Company's interest to pull down and rebuild it firm and strong, so as to last for many years, but we find upon enquiry that Mr. Yale agreed for this building formerly by the grade which we take to be reason why it was not better performed." "Ordered that the foresaid buildings from the Carpenter's yard to the godown be pulled down during the rains in order to be rebuilt when they are over and Mr. Way is desired to get ready a draught of a new building upon the same ground." The Governor at the time was Harrison and the Surgeons were Thomas Robson and Anthony Supplie.

Despatches from England written in January 1712 mention that the Hospital was under construction and add how the expense was to be met. A plan of the hospital was also sent. "Are building a Guard House and Hospital for the Soldiers near the River-side as per plan sent. Hope to finish it by the next season. Shall apply fines and forfeitures to the use of this building and subscribe themselves and get others to do the same, hope to finish all and have a fund for the hospital to relieve the Poor at as little expense to the

Company as Egmore building has cost much though it is not finished."

A few days later the Council added "Refer to these to what wrote in the General Letter, shall by his example prevail for contributions towards the new Hospital."

A SUBSCRIPTION LIST FOR HOSPITAL

At a consultation dated 25th February 1712 was read "A subscription for an hospital as entered after this consultation." "A proposal being made for building a *Compleat and convenient Hospital* for the use of (all) Soldiers, Seamen and poor Inhabitants, of this place the said Hospital to be under the direction and management of the Governor and Council, the Minister and Church Wardens for (the) time being who are to take care that the money (be) applied rightly to the use intended. We the subscribers are content for the several sums under-mentioned to be applied to the buildings of the said hospital and the overplus to remain at interest for a fund to keep the same in good repair, and to supply it with such necessary's (as) will best answer the intent of this Charitable contribution."

"FINES AND PENALTIES" UTILISED FOR HOSPITAL FUND

There is a valuable extract in a consultation dated 5th May 1713. Telesinga, the chief cook of the Fort, who was fined "pays in his fine of fifty Pags. to the new Hospital for having rented a village under the Moors Government without the knowledge or permission of

this Board." The old custom of appropriating the fines for the benefit of the hospital, brought into vogue by the E. I. Company in the early part of the 17th century during Yale's term of office, was still a source of income.

THE PLANS OF THE HOSPITAL

In Feb. 1713, The Company in England acknowledged receipt of "The draught of the ground plan of the intended Egmore Guard House and Hospital for soldiers, with other lodgings necessary." The reconstruction of the Hospital was entrusted to Mr. Way "a very able man in building". In October 1712, the Council of Fort St. George wrote "We shall send complete draught of the Hospital in the next letter." But even in Jan. 1713, the plans were not ready "We could not get ready the complete draughts of our Hospital which we promised in our last, as the rains washed down the best part of Fort St. David buildings and Mr. Way was sent down there to survey and bring plans of the necessary works." The same explanation again was offered in a letter dated 4th Feb. 1713. "Mr. Way returned so late from Fort St. David that he had no more time than to complete in the draughts now sent which was so necessary a work that we would not take him off to finish those of other new buildings here, which we promised to send in our last letter." The ship Howland sailing on 14-2-1713, carried a packet of papers amongst which is one entitled "The Draughts of Fort St. George as proposed to be altered."

ACCOUNTS DURING THE BUILDING OF THE HOSPITAL

After the Council decided to build a new Hospital, work seems to have been started promptly, for in a consultation dated 27th March, 1712, Dr. Buckley, then Paymaster, in his accounts for the previous month, noted under a *new heading* "New Hospital" expenditure of Pag's 251; 38. Subsequently, this item appears regularly for some months.

It may be presumed from the perusal of monthly statement in the records that the construction of the Hospital was completed by the end of 1713.

A DESCRIPTION OF THE HOSPITAL BUILT IN 1712-13

In October 1712, was forwarded to England the following report:—"The New Hospitall is in a manner finish'd, but will cost Us something more in the end than we expected, because the Fortification wall to the River side, was so very bad that we were forced to lay a new foundation and rebuild it, and half the Pegue Ships losing their passage, Timber has been this year much dearer than Ordinary, which is the most considerable Article in building, when we ord(ered). The subscription we wrote Fifteen hundred Pag for your Honors and are now pretty well advanc'd, but intend to keep it allways afoot, and have agreed a certain sum to be contributed out of all Profitable voyages; the whole builing is plain, uniform, firm and usefully contriv'd to lodge an hundred or an

hundred and fifty sick men upon Occasion ; the Totall charge will amount to *seven thousand Pag.* more or less, and though it swells your Paymasters Accots, at Present you will have Credit for what is gather'd in upon the Contribution in your General Books; in which we promise our utmost care and Diligence."

A later communication dated September 1713 gives an account of further progress made in this direction. "We gave your Honors, a full Acct. by the *last Shipping* of our proceedings in what chargeable Article of Building, and do now reassure you *that we have acted* with all possible frugality; the Hospitall and guard house are finished to a Trifle, *and the People removed* into them; we were not able to undertake the Colledge *at the same time.*"

"The subscription to the new Hospitall shall come *by this years shipping,* when we hope it will be considerably Augmented, and we shall keep it afoot in hopes after the Building is paid for to have a sufficient Stock, for the relief of such poor people as are taken in to be cur'd and have nothing to help themselves."

Even in January 1714, the subscription list was not closed. "We keep the Subscription to the New Hospital here till the dispatch of the last Ship in hopes of an Addition from those Gentlemen bound home." "All we have to add under this head is, that According to promise we now send the Subscription to the New Hospital, *which* if Voyages come out well this next Season will be very considerably increased." Ship '*Recovery*' *sailing in*

Feb. 1714, carried a packet of Papers—among which one was "subscription to the New Hospital of Fort St. George." A letter from England in 1717, also refers to Fort St. George consultation "advising of the money paid and received for subscription to New Hospital".

MISCELLANEOUS MATTERS

There were, however, a few matters of minor importance connected with the Hospital which came up for settlement in the course of the next few years. The Church House, belonging to the Parish, was pulled down in 1711, in order to extend the Hospital and Free Guard House. A verbal promise was made at the time that compensation would be granted. In 1716, after considering a representation from the Ministers and Church Wardens the Council agreed to grant to the Church "Toddy trees in the Burial place (Guava garden) yielding not more than 20 pagodas per anum and a sum of 300 pagodas in cash in full satisfaction of all demands for the house aforementioned." In November 1717, the amount was refunded in return for Jersey House, granted for a new school building.

About the year 1715, after hearing the remarks by the President, following his examination of Conicapillay's account of the duty of 10 cash upon every pagoda received for customs and granted to Corporation on condition that it be employed for beautifying and adorning the town, with useful and necessary buildings, it was resolved that the "Remainder of the money, if it

be no more than will balance the Account, be written off to the account of the new Hospital (one of the most "useful buildings that can be thought of at present").

REPAIRS TO THE FORT HOSPITAL BY THE RIVER-SIDE

During the next three decades after the construction of the Hospital, the patients were accommodated in the same building, with very little major alterations. Minor repairs and whitewashing *etc.* were frequently needed. The first allution to these occurs in the records of the year 1720 "Repairs to Hospital" and the account for the next month explains the extraordinary expenses as due to the repairs to Hospital. In 1723, there seems to have been some repairs to stop leaking in at the Terraces of the Hospital. In 1727, there was a necessity for considerable repairs, to pavement and doors *etc.* In that year, according to the orders of the council, the surveyor of the works reported on sundry repairs wanting in Company's buildings. The portion relating to the hospital is extracted below:—

"In the new house and hospital, the chunam and pavements both within and without want mending and the doors and windows have not been painted for many years by which the wood has suffered very much. On this occasion, we beg leave to remark that it would tend very much to preserve the buildings in general to paint the doors windows and rattans yearly or atmost every two years." (The necessary repairs under this head and

Estimates for Chunam, clay, sand, and wages *etc.* are given but ommitted here).

Even in 1730, the Hospital building seems to have been looked upon, as a model structure. The Capuchin missionaries in requesting permission to rebuild the cells and apartments of their church added that they "design to do it after the model in Tuscany, answerable to that of your Hospital and Guard House."

A Committee of Council (Works Committee) made a survey of fortifications and buildings in 1732 and submitted early in 1733, a report naming in succession all works, that needed restoration. The list includes "Hospital and Doctors lodgings" "Carpenters' yards to the northward of Doctors' lodgings".

Here is the estimate for repairs :—

Hospital and Doctors' lodgings.	PAGS.		
Palmeras and Rippers	2	0	0
Teak plank 1	3	0	0
Nails and Carpenters	3	0	0
Chunam	12	8	0
Wall bricks 2550	1	18	0
Paving do 3150	4	18	0
Tiles 2000	0	28	0
Cadaci gram for brick-layers wages	21	27	0
	48	1	0

In the year 1739 in the accounts for October, an entry is made indicating repairs to the hospital and buildings costing Pags 23—10—0.

NEW REGULATIONS EOR EFFECTIVE CONTROL OF HOSPITAL

The next important advance in the administrative control of the Hospital occured in 1741, when strict supervision by the Guard was ordered. A consultation dated Monday June 1st, 1741, states that after considering the honourable masters regulations for the Military, the following conclusions were recorded:—"The officer of the Guard visits the Hospital once a day to see *that* no abuses happen there. (2) The Surgeons have hitherto reported to the President the number of men entered in and discharged from the Hospital and how many remained there every month, but from henceforth they shall also give a list of their names."

Under the duties of Military officers and soldiers as daily practised in the *Garrison of Fort St. George*, 1741, we note the following :—

CAPTAIN'S DUTY :—" The Captain of the guards to visit the Hospital once in twenty four hours, during the time of his being on guard, and upon the decease of any of the military, to acquaint the Governor therewith, likewise upon the desertion of any of the Military the Governor to be informed immediately."

Sergeant's duty :—" If any one gone into the Hospital, he is to report them to the Captain of the Main Guard."

THE CORPORAL:—"The barracks and Hospital doors to be shut at 10 at night and opened at gun fire in the morning."

SICKNESS OF SOLDIERS BRINGS INCREASED ALLOWANCES TO OFFICERS

In the year 1744 during the war with France, the Hospital was overcrowded. In one of the despatches dated 24-9-1744 it is recorded "For some months past there have not been less than 40 to 50 of the Military on the sick role". Hence, some temporary and special concessions were allowed and this was communicated to the Honourable masters in a despatch dated 15th February 1745.

"Having a considerable number of the Military in our Hospital this year and the servants allowed to the Commissioned Officers reducing besides the number of Mounting Men, we agreed to allow the Lieutenants in lieu of all servants and other advantages five (5) pagodas each a month and to advance the pay of the Ensign to thirteen (13) pagodas a month but this only to be continued to them so long as we think proper." Next year, conditions returned to normal as shown by the following extract:—"Agreed also that, as the number of Europeans in the Hospital is now pretty well reduced, the additional allowance of five (5) pagodas a month made to the Lieutenants in Coneultation of the 24th September last be discontinued as also the 4 pagodas a month to the Ensigns and that the allowance to the Lieutenants and Ensigns be the same as before we thought it necessary to make those additions."

A PEEP AT THE SEIZE OF MADRAS, 1746

The statement of the Garrison referring to September 1746 notes " In the hospital, as by Surgeon's monthly report of September 1st and his certificate...... 34 persons." When De La Bourdonnais encamped on the east side of the Triplicane, Doctors Nathaniel Barlow and Andrew Munro, with their surgical instruments and appliances occupied one end of the building of the Church of St. Andrews, as the safest spot in the white town. The Journal of John Hallyburton describes the sad plight of Fort St. George during the attack, immediately before the surrender.

" 7th September—the shells of which about a 1000 fell in the town, though they killed but 6 persons yet kept the Garrison from sleeping day or night, and some bursting all the Doors of the Houses they fell into, gave the lower sort of People an opportunity of getting drunk. Some sailors and others got over the walls into the black Town, and fell to plundering."

On the 10th September 1746, the English surrendered Madras to the French. The English settlers and Company's servants went or fled to Fort St. David and remained there till the rendition of Madras.

AFTER RENDITION OF MADRAS

Fort St. George was reoccupied by English on 21st August 1749, under the Treaty of Aix-la-Chapelle. The Hospital continued to be in the same building by the Riverside all these years. But in the few months

following restoration of Madras, the hospital seems to have been over-crowded. In July 1750, Dr. Munro re-employed as Surgeon of the Fort, represented want of accommodation in the hospital. Munro's own qauarters at the south end of the Hospital were occupied by the Fort Adjutant while rooms of the north end, formerly allotted to Dr. Barlow had been "immured and straightened"[2] by the French. At the same time, the increasing strength of the Garrison demanded more elbow room. These considerations prompted the Council to think of converting the hospital into Barracks and transfering the hospital to Peddanaikpeta.

THE HON'BLE COMPANY'S DIRECTIONS FOR BETTER SUPERVISION OF HOSPITAL

In the early part of 1752, the Court of Directors sent out the following instructions, regarding the attendance of the surgeons, the hospital stoppages and the general supervision of the admissions and treatment of the sick in the Hospital. "Complaints having been made to us that the Surgeons of our Hospital do not give due attendance on our sick and wounded Military, and that it is the custom for the Surgeons to take their pay during the time they are in the hospital. That nothing be stopt from the sick or wounded Military in the hospitals, but the charge for their provisions, that is to say, so much only as they usually give for their diet when in health. We also direct that one of the Council, by turns, do visit the hospital at least once in a week or oftener if you shall think it necessary, and report to the

Board whether the Surgeons are regular in their attendance and give all the relief in their power to the sick; that they are kept clean and have the proper provisions. That the Major do also inspect the hospital in like manner, and make his report to the Governour, and that you annually send us an account of the Military who have been sent into the hospital, inserting the disorder of each man, when he was received, and when discharged. And we further direct that in case our Surgeons are remiss in their duty, or unequal to their employment, you are, without regard, to dismiss such person our service."

HOSPITAL CONVERTED INTO BARRACKS

The first entry recording the proposal to shift the Hospital from within the Fort to the Town outside is in a Consultation, 29th June, 1752:— "As it is become necessary, by the encrease of our Military, to provide Barracks for their reception; and the Hospital being, by its Situation fronting the Parade, the only proper Place for that Purpose, which at the same time renders it very improper for its former use. Agreed that, for the present, it be converted into Barracks, and that the several houses approved of by the Major and Surgeons (a List whereof is now delivered in, read, and entered hereatfer) be fitted up for an Hospital." The transfer, however, was not effected till May 1753.

CHAPTER V

The Staff of the Fort Hospital

THE SURGEONS

The first or the earliest surgeon that can be associated with the Hospital, in its very infancy, was Philip Bradford, who was surgeon to the Fort about the year 1665. He was said to be "eminently for his years *skilful and successful in his surgery and Physic also.*" Consequent on his death in 1668, Dr. Jordain succeeded to the post. By 1669, the council at Fort St. George wrote to the Hon'ble Company urging the necessity for another able surgeon that "we may not be wholly destitute in case of sickness or death of Mr. Jordain, who is the only one we have to make use of." The next surgeon mentioned in the records is John Waldo, who arrived in June 1670. The newly sanctioned post of *Additional Surgeon* to the Fort was given to Bazzalliel Sherman, who arrived in August 1676. The following extract from a despatch from England to Fort, mentions the reasons and the terms of the appointment :—"Considering how numerous the people with you grow, (and) being desirous to use all means for the preservation (of) your healths, we have entertained here Mr. Bezzalliel Sherman, also as chirurgeon and at the like salary with him already there; he carries over with him his wife, passage free and one (Lacuna in the original) an apprentice at his owne charge and both are to be at his charge there and he is obliged to bring the

Sd. Apprentice up a chirurgeon and noe otherwise imployed and to remaine at the Fort." Waldo went to England as a ship surgeon in January 1678. Sherman, paid in 1677 a subscription of £ 10/- towards the construction of St. Mary's Church, (the foundations of which were laid in March 1678) He died on 25th August 1680, and the place was filled up by Henry Mellory, who was recommended by the Council as a diligent and able surgeon, and who had returned from Bay Factories. Heathfield, formerly surgeon to Masulipatam and Madapolam Factory from 1673, left his employment and came to Madras in the ship 'Samson' in January 1681. Soon after his arrival at Madras, he secured employment as surgeon to the Fort at £. 36 per annum, "he being an able person". Mellory was posted to Masulipatam as a substitute for John Heathfield. The latter was one of the party, who, in December 1681, accompained E. Yale part of his way and dined in Bridger's Garden. He seems to have left the post of surgeon at Madras on 25th May 1685. As Col. Love points out, John Heath field had served the company as Surgeon upwards of sixteen years, when, inspired by the brilliant example of Rev. Ord. he petitioned to enter the civil service. Heathfield served as a factor in the capacity of assistant to the Customer in the Customs Office till he was posted to resume his former post as surgeon from July 1687, after the receipt of the following stiff reply from the Company, "We understand not the mystery of Mr. Heathfield's leaving his surgery, to turn a factor at £ 15/- per annum and are apt to suspect there is more in it than we are

aware of, because he is a great trading merchant and has many relations in the country that are so and which is worst of all, we know the interlopers reckon him among the number of their friends and therefore we do hereby expell him of our service, if he cannot content himself with his old employment of surgeon to our factory." He did not live long after this, for he died in 31-3-1688. His tomb-stone can still be seen in the graveyard of St. Marry's Church in the Fort.

In the list of persons at Fort in 1686 and part of 1687, when John Heathfield was acting as Factor, the names of Surgeons are given as Samuel Wilmont and John Plumer. Francis Pierce, doctor's mate of Ship 'Rochester' was also surgeon at Fort in 1685. Wilmont was formerly surgeon-mate of the ship 'Resolution' and was engaged as Heathfield's assistant in January 1683 on 5 pags, a month and became a surgeon in 1685. Wilmont died in September 1687. Plumer, who entered as surgeon in 1684 seems to have left the service in the latter part of 1687.

The following extracts relate to the appointments of this period.

"3-9-1687 :—John Plumer lately one of the chirurgeons of the Fort leaving his employment, to be chirurgeon of Royal James and it being a very sickly time amongst us and the soldiers, it is ordered that James Birley, late chirurgeon of Ship Rose, be taken into the place and pay. (And that his chest of Physick being examined and valued by Dr. Heathfield at 50 pags be bought of him, there being no medicines

sent us by last shipping, so that we are in great want thereof."

"10-10-1687:—Ordered that Bernard Ozler late surgeon of the Loyall Adventure, be entertained at three pags. a month and his diet at the general Table there being occasion for him this sickly season."

On the death of Dr. Heathfield on 31-3-1688, Dr. Samuel Brown was locally appointed surgeon to the Fort. On 7-4-1688, the Council considerd the appointment of a successor to Dr. Heathfield at the Hospital "Dr. John Heathfield being deceased and Dr. John Plumer gone home upon "Royall James" and the Hospital being in great want of an able chirurgeon, Dr. Samuel Brown, late chirurgeon of Dragon, being reputed so and desirous of the employ, it is ordered that he be entertained at the same salary and allowances as his predecessor Dr. John Heathfield." In the period 1688-89 Samuel Hart was appointed surgeon to the Fort. In due course, the Company sent from England Dr. Edward Bulkley, who arrived in 1692. Hart was then discharged. This appointment is alluded to in a letter dated 1697. "When we understood Mr. Heathfield was dead, and that you had entertained Mr. Hart as a temporary Surgeon in his stead, we resolved to supply you as soon and as well as we could, and accordingly sent you, five or six years since, Mr. Bulkley, one who was every way very fitly qualifield to serve us by his large experience of India as well as here, and as fit for prescribing Physick as manuall operation; and we suffered him to carry out an apprentice that so he might

not Complaine of want of help. And therefore him and him only wee resolve shall receive any Sallery and allowances". Dr. Bulkley was a man of energy and ability. The council at Fort St. George passed the following orders on his arrival :—" Ordered that Bulkley do enter upon his charge of Hospital and take *Care of the patients therein and Look after all the medicines and other things carefully that none be spoiled or wasted negligently* or used for any other end or purpose but those they were intended for. And that he keep *an account of all material actions in a book that may remain in the Hospital.* Dr. Brown is to be continued as a surgeon here as before."

Dr. Samuel Brown who was thus superseded by Bulkley continued to be on the staff of the hospital till 1697 when the Company sent orders to discharge him. He was later posted to Bengal but he excused himself from going there by reason of his engagement in practice at Madras. The Company, however, held out a ray of hope. " As for Brown, if it please God our surgeon of the Fort or Bay or elsewhere should die or be moved, we are willing Mr. Browne should have first preference to such a vacancy." But, alas! when the vacancy occured in 1705, Brown was dead. Brown's career at Madras was a very exciting and eventful one, as can be gathered from the following extract, from Col. Love.

" Samuel Brown, surgeon of the Dragon, was appointed surgeon at Madras in May 1688. Four years latter, he was superseded by the appointment of Bulkley on his

return from Europe as first surgeon. Browne was believed to be responsible for the accidental poisoning of James Wheeler in August 1693. Browne was acquitted by the jury. The case is of medico-legal interest. He attended the Nabob Kasim Khan for a wound in 1694. He seems to have been a popular doctor but was also getting frequenty into trouble as when he challenged Blackwall in 1695 or for assaulting a native in 1696. He was discharged in 1697 as the Court of Directors disallowed the appointment of 2nd surgeon which he held for ten years. He died at Madras in September '98. It is recorded in the dictionary of National Biography that Browne sent from time to time to England collections of dried plants which now form part of the Herbarium of the British Museum."

Dr. Bulkley made a great reputation and became famous in the annals of Madras where his memory is still perpetuated by the Bulkley memorial opposite the grounds of the Madras Medical College. The great esteem in which Bulkley was held by the Council is reflected in a decision taken in 1705-6. He was granted for his extra-ordinary services, "the rest of the house rent and 8 pags a month, for diet." The Consultation also added "He deserves it well." In January 1709, he petitioned for leave to lay down the Company's service alleging the reason thereof that "he is very much indisposed by the Stone which he fears will be suddenly fatal to him and recommends Mr. Roberson, Doctor of the Montague, a fit person to succeed him in that Employ. His petition is as entered after this consultation."

To the Hon'ble Thomas Pitt Esq.,
President of the Council.

Sir,

The fatigue of much business being now grown more uneasy and disagreeable than formerly, I beg leave to be discharged from my office, there being a fit person to accept the same.

Edward Bulkley.

The Council appointed his successor in February :—

"......This day appeared in Council Capt. Stocks, Doctor Bulkley and Mr. Roberson, when Capt Stocks declared his consent to Mr. Roberson staying here and Doctor Bulkey recommending him as a fit person was this day entertained as Surgeon of this Garrison."

It may be noted here that the Company recognised the great value of Bulkley's presence and experience by offering him a seat on the Council of Fort St. George. He took his seat on 19th September 1709 as 8th of the Council and held the appointment of the Store-keeper and one of the justices of the choultry. He later became sixth member and held the portfolio of Land Customs. In the early part of 1713, Bulkley again petitioned to lay down the Honourable Company's Service on account of his health. A Consultation dated 4th February 1713 records. "E.B. having been for sometime very much indisposed and finding himself in a decaying condition has desired to lay down service and retire from business which is agreed to, as soon as the last month's paymaster account is passed." The President offered to continue Dr. Bulkley without the fatigue of acting in any

employ that may be prejudicial to health but the doctor excused himself and renewed his request and Thomas was appointed to fill up the vacancy. A short note in the consultation records his death. "10th August 1714—Early this morning died Mr. E. Bulkey formerly of this Council here." A despatch to England recorded the event in the following appreciative terms: "On 10th August last died Mr. E. Bulkey much regretted by everybody here, as having been a very good useful inhabitant and charitable man."

The vacancy in the hospital caused by Dr. Bulkley's resignation in 1709 was filled provisionally by Dr. Thomas Robson of the Ship Montagu. The Honourable Company also sent from England Dr. Chadsley in the place of Dr. Bulkley. A letter from the Company dated January 1710 directed: "We have sometime since entertained Dr. Richard Chadsley to be our chief surgeon at Fort St. George in the Room of Dr. Bulkley, whom we last year appointed to be of the Council. His salarly is to be 36 pounds a year and as to whom you entertained either continue him as under Dr. Chadsley or dismiss him, as you judge proper." On 24th July 1710, the Council sent for Chadsley and "ordered that he now take charge of all this now relating to that employ and that he have the same privileges and allowances in all respects as Mr. Bulkley had." On the same date "Mr. Robson, the present surgeon being sent for and acquainted with the preceding order, he requested that he might be continued in the service as second surgeon of the Garrison and in consideration that we think it highly necessary for, to have

two sugeons here, it is therefore agreed and ordered that he be entertained accordingly and have the same allowances as Dr. Brown had when Dr. Bulkly was sent out by the Hon. Company." This Richard Chadsley died on 30th May 1711. Next day, 1st of June, Robson secured the vacant post. "Dr. Chadsley, surgeon of this place, having for sometime laboured under a lingering fever departed this life on the 30th past month and Dr. Robson petitioning he might succeed in his employ, it is agreed that he be allowed the same perquisites as the late Dr. Chadsley had until the Hon. Company's pleasure be further known in this matter." In the same year, Anthony Supplie came from England as personal surgeon for the voyage with Governor Harrison. He was originally surgeon at Masulipatam and later surgeon at Fort St. David from 1705 and now appointed second surgeon of the Fort. Hospital. A general letter from Fort St. George, dated 20th August and 4th September 1711, reports in para 12—"Mr. Chadsley, Surgeon dy'd the 30th May; Mr. Anthony Supplie put in his stead; the unhealthy season makes them want 2 Surgeons; the Hospital for 12 months past has had always 40 or 50 persons in it; want 3 or 4 surgeons mates initiated in Anatomy and Physick and sent to supply other factorys: the Surgeon at Fort St. Davids is a freeman of Pondicherry and acts at present but will not be obliged to stay; a good man may be sure of that post." In February 1713, the Company wrote "Supplie one of the Surgeons; not the chief, that being Mr. Robson due by succession. We direct he do enjoy it." A

General letter, dated 16th September 1713, in para 124, defines the respective duties of Robson and Supplie as follows:—"When we wrote that we have taken Dr. Supplie into Dr. Chadsley's place, we did not mean as Chief Surgeon, not having known any distinction. Their provinces distinct; one attends the Hospital the other attends on your convenanted Servants if they please and assists in the Hospital when necessary if there is too much work for one. Dr. Robson had his choice and declares he does not complain."

Dr. Supplie continued till 1716 when he petitioned on account of ill-health for leave to retire from Company's service. His request was granted and a substitute was appointed. The Council wrote to England asking for a substitute. "1716. Anthony Supplie, Surgeon returns on the Mary; desires another, or surgeon's mate, qualified to succeed; have but one, *Dr. Duncan Munro* under Dr. Robson."

Meanwhile, Dr. Andrew Pitchier who served on the West Coast was entertained as Surgeon to the Fort on 28-8-1716. There is an entry dated 17th September of the same year: "Andrew Pitchier, Surgeon, having served the Hon'ble Company faithfully and well in that station upon the west coast four years, and Mr. Joseph Collect by his own experience, knowing him to be capable and deserving man, agreed that the said Andrew Pitchier be entertained one of the surgeons of this place on the usual allowances in the place of Anthony Supplie that laid down the service in January last and went for Great Britian."

At a consultation dated 24th May 1720, there is a reference to the appointment as Surgeon of Mr. Duncan Munro. He was "Some time ago Surgeon's mate of this place and had behaved himself to satisfaction. He arrived from Malabar coast whither he had gone a voyage." The Council ordered that he be entertained as 2nd Surgeon of this garrison. "Mr. Robson being lately dead, and we being in want of an able man, there being a great mortality in this place." He was soon promoted to be the Chief Surgeon. On 4th August, 1720, Council ordered "The Hon'ble Company having appointed Mr. Munro, Chief Surgeon of this Garrison, on the 1st vacancy in that post and Mr. Robson being lately dead, whereupon the said Mr. Murno was admitted as youngest Surgeon." "Ordered that he do now take place as Chief Surgeon of this Garrison, according to the Hon'ble Company's directions." Munro is said to have been "well qualified." The other Surgeon at Madras at this time was Andrew Pitchier, who seems to have been superceded in making the new appointment. Both Munro and Pitchier appear to have continued for another 5 years as colleagues. At a consultation dated 22nd June 1725, a petition was read from Munro and Pitchier praying for another assistant in the hospital. Here is the actual petition.

"Hon'ble Sirs,

The two surgeons' mates were usually maintained in the hospital here by the Hon. Company to assist your petitioners, yet for some months last past, there is not

one and the sickly season of the year now approaching, which may require more hands. We entreat your Hon. *etc.*, Council may take it into consideration.

Gentlemen,
Your most humble servants,
Andrew Pitchier,
Duncan Munro."

On this petition, the following orders were passed:—"Petition being considered and Mr. Ramsay who is recommended in the general letter from the Hon'ble Masters being willing to act as a mate till a vacancy happens, agreed that he be entertained at 10 Pags, a month to commence the first of next month."

Duncan Munro resigned in January 1726. He was honoured by being chosen as Alderman of Madras in 1727. George Ramsay was promoted to this place as one of the surgeons of the garrison but died in July and this vacancy was filled up by Lindsay who was acting during Ramsay's illness.

In 1726, Lindsay had petitioned offering his services as Doctor's mate of the Hospital. "Mr. Ramsay of the Garrison having been for sometime ill and continued incapable of acting, I beg leave to offer myself to act as mate during his illness, with the usual salary and allowances." Within a month the council read another petition from the new surgeon's mate:—"Mr. Ramsay one of the surgeons being deceased I beg leave to offer myself to succeed him in that station...Mathew Lindsay." The Council ordered as follows:—"Mr. Lindsay being a

universal good character and being judged a man capable in his profession, resolved that he be entertained one of the surgeons of the garrison with the usual salary and allowances." The Council wrote to Company in 1727 as follows:—" There was no vacancy when Mr. Barlow came here and he is proceeded to Bay. Mr. Lindsay having as we before advised your honour quitted his employ of surgeon of the Lyell and submitted to be surgeon's mate here, upon the encouragement we gave him of succeeding on the first vacancy which we did upon the recommendation of Captain Small. He succeeded Mr. Ramsay according to our promise and therefore we could not displace him again, as he behaved very well and is much esteemed by the inhabitants here." An entry in 1728 throws interesting sidelight promising an appointment in the Fort St. George for earlier services at Bencooloon (Sumatra), evidently a very unhealthy place. " The gentlemen of Bencooloon having represented to us that the surgeon we last sent them, Mr. Des Champes, is very ill and that the climate disagrees with him so much as to make him resolved to come away should be recover, and Mr. Douglas who has just come from camp being prevailed upon, though he dislikes the place very much to return thither in this emergency, when we can get no other person fitly qualified for the same, Agreed that, as a consideration for his so doing we do allow him the same dyet allowance as is given to the youngest of the Council there and further that if Honourable Masters do not appoint a surgeon out of England *we*

will call him to the first vacancy that shall happen here after Mr. Barlow." In 1729, Dr. Barlow petitioned as follows:—

"Your petitioner was by the Hon'ble Court of Directors sent here in order to succeed as Surgeon on any vacancy which might happen after your petitioners arrival and your petitioner apprehending that there will shortly be a vacancy by the resignation of Mr. Andrew Pitchier.

Your Petitioner therefore most humbly begs your Honour *etc.*, that he may suceed the said Mr. Andrew Pitchier."

The Council promised to consider this claim.

Andrew Pitchier died on 14th September 1729 and according to the above mentioned terms Nathniel Barlow was entertained as Surgeon from 25th November 1729.

Lindsay died on 24th August 1730 and was succeeded from the same day by Robert Douglas who had come to Madras from Bancooloon in October 1729. "President acquaints the Board of the death of Lindsay, surgeon and proposes Mr. Thrieplant to succeed him as one who served at Fort St. David a long time, very capable and diligent ever since he has undertaken that laborious employment and the care of the garrison as numerous as this without any help or encouragement but the Company's pay. Dr. Douglas giving in remonstrance that he would not have gone to the west coast but upon condition of having the first vacancy at this place, which was then promised him as appeared upon the Consultations signed by the late President and

Council, assured that Mr. Douglas be allowed to officiate till the Company's pleasure is known, as we can't suppose any agreement so absolute as to exclude the Company's choice." The matter was referred to the Company at Home for the final decision regarding the rival claimants. A letter dated August 1732, repeated that Douglas was confirmed as surgeon. At the end of 1733, the Surgeons at Madras are stated to be Robert Douglas and Barlow.

On 30th January 1742 the Council read a letter from Robert Douglas acquainting the Board with his intention of going to England for the benefit of his health and asking permission to leave his station. A letter dated 4-3-1742 gives an interesting account of the changes in the staff at various stations.

"One of our Surgeons, Mr. Robert Douglas taken his passage to England on the "Wager" having behaved very much to our satisfaction during his stay here."

"We shall call Mr. ANDREW MUNRO up hither to supply his vacancy, and send Mr. William Belches to Fort St. David." The Diary and consultation show that Andrew Munro arrived from Fort St. David on 14-3-1742. From September 1742, records mention Barlow and Munro as the Surgeons of Fort St. George, drawing a pay of £36 per annum (or 40 Pagodas a month).

The names of the same two Surgeons, Andrew Munro and Barlow occur in the records till 1746 when Madras was beseiged by the French. During the actual bombardment of Madras, these two doctors with their medicines, dressings and equipment took shelter in

St. Andrew's Church in the Fort as a safe place and attended to the sick and the wounded. After the surrender of Madras they seem to have left the Settlement along with the other English employees. Barlow's name does not appear again in the Fort St. George records. But Munro came back to Madras in the latter part of 1749 *i. e.* after the rendition of Madras. Company's letter dated 12-1-1749/50 to Fort St. David, then the Presidency, directed:—"If Mr. Munro or Mr. Lightfoot apply to be taken into Company's service in their former stations at Madras as Surgeons, you are to entertain them accordingly." A despatch dated 2nd November 1749, says "Mr. Munro who was former Surgeon at Madras, we have reinstated at the place." In the statement of general account showing the payment of convenanted servants in the Company's service at Fort St. George on 31st December 1749, Dr. Munro, Surgeon, is shown as drawing pay of 36 Pagodas per mensem with some allowances which will be detailed later. The hospital had also one surgeon's mate at this time and his name was James Wilson. In addition to his pay of 15 Pagodas per mensem, he had also an allowance of 10 Pagodas per mensem for acting as Steward of the hospital in addition to his own duties.

In the middle of 1750, Munro addressed a letter to The Council which is an important document showing the condition of the hospital and the work of the doctors.

Sir and Sirs,

I must beg leave to lay before you, the *State of the Hospital in* order to show the necessity I am under of

hiring a house, or proper lodgings. Upon Admiral Boscawen's taking possession of this place in August last, *The Hospital was, and is so much Crowded ever since, that there has not been proper Room for the sick, so* that the usual *appartments for the Mates, have been taken up by them.* One of the Surgeon's lodgings the Officers have possessed ever since; the *other appartment* I mean the late Mr. Barlow's being immur'd and straightn'd by the Fench, in fortifying the place; so that there is hardly room for the two Assistants; therefore I must request the favour that some allowance may be made me for house rent which I now pay the Hon'ble Company themselves.

I must also beg leave to represent, that I have been all along *in great want of an assistant; having had but one mate* all this time; I need not say, *there usually were two allowed; as well as two surgeons*, when there were fewer men in this Garrison than there are at present; therefore I hope my request will not be thought unreasonable and now begging pardon for giving all this trouble, I conclude with all the respect and consideration immaginable.

Worshipful Sir and Sirs,
ANDREW MUNRO

Fort St. George,
29th June 1750.

As the Adjutant was accommodated in the Surgeon's lodging, conveniently situated near the parade, Dr. Munro was granted a house-rent allowance, as requested. The council also recommended to the Presidency (Ft. St. David) that a second assistant may be sanctioned.

Chapter VI

Surgeons' Mates and Assistants

As the number of patients and the amount of work in the hospital increased gradually, the surgeon was given an assistant to help him. As early as 1675, a surgeon's mate was probably allowed. Henry Malory formerly Surgeon to the ship "President" was a Surgeon's Mate at Madras in 1675-76. The post of the assistant seems to have been converted into that of a second surgeon in 1676. Later, in 1690, on the representation of the Surgeon, the Council at Madras sanctioned the additional appointment of an assistant and entertained one formerly belonging to the ship "Kempthorne" at 91 fanams per mensem. There is a reference to one Rowland Jones, Surgeon's Mate, who died in 1690. Faucet was Surgeon's Mate in 1692 and was later sent to Fort St. David. In January 1693 Samuel Wilmont was appointed as Surgeon's Mate on 5 Pagodas per annum. In 1696, when Dr. Faucet was iudisposed, Joseph Royall, a soldier skilled in Surgery, was appointed as assistant to Surgeon.

The selection of the Mates and Assistants was made on the recommendation of the Surgeons themselves as can be seen in the following extracts:—

"13-1-1698. Doctor Bulkley recommending his apprentice Mr. Edward Rawdon, who has served him above 6 years as qualified for his mate, and one Jacob (Dunot) a Dutch Musteez for an assistant, it is ordered

that there be allowed five Pagodas a month (to the mate) and three to the assistant." But Rawdon soon changed his profession and became an Assay Master in April. He again sought his appointment as surgeon's mate in 1704.

"25th April 1698.—Dr. Bulkley requesting that one Jeremy Harrison, a soldier of the Hospital may be his assistant. He is accordingly appointed at three pagodas per mensem and discharged from other service of the Garrison, so long as he shall be so employed.

"12-8-1700—Dr. Bulkley having requested that Charles Venall come out as his apprentice by the last shipping, may be allowed some consideration. It is resolved that the Paymaster pay three pagodas per mensem. Mr. Harrison formerly entertained, being lately removed from the Hospital."

The following additional extracts are interesting in connection with the appointment of the Assistant to Surgeon or the Surgeon's mate:—

"June 1701.—Upon the recommendation of Dr. Bulkley, it is ordered that Robert Ingram be entertained as assistant in the Hospital at three pagodas per mensem and to be allowed for two months which he has already served there."

"30th August 1703.—Robert Ingram, Surgeon's mate requesting to be discharged agreed the same be granted to him and that Joseph Hall whom we procured out of Colchester be entertained in his room at Five Pags. per mensem."

"6th March 1704.—Ordered that Mr. Edward Rawdon be entertained as *Doctor's Chief mate* at five pags. per mensem."

"10th August 1705.—Ordered that Mr, Hall be entertained *Doctor's Second mate*."

"8th November 1705.—We having spared our Doctor's mate Mr. Hall to Ship Queen. It is agreed that Richard Morton be entertained in his room, Dr. Buckley representing to us that he is well qualified for that employ." In March 1709 Morton was sent as Surgeon to Fort St. David.

"25th August 1709.—Mr. Morgan who succeeded Morton as Surgeon's mate requesting to lay down the Company's service agreed the same be granted to him and John Westerby be entertained in his room."

"26th September 1709.—Agreed that William Douglass be appointed as Surgeon's mate at Pags. five per month and Company's Table."

"22nd March 1710.—John Westerby, Doctor's mate, delivers in a petition wherein he humbly requests that he may be allowed the usual allowance of 5 Pags. a month and in consideration that he has given a general satisfaction in his employ agreed that his request be granted."

"23rd June 1713.—Duncan Munro appears before the Board and produces a certificate, signed Thomas Lewis, setting forth his being entertained Surgeon's mate for this Garrison." (Munro produces his certificate for being Surgeon's mate).

The Company wrote from England in 1717.—"On perusing your letter, we have elected the Surgeons'

mates for Fort St. George, *viz.*, Mathew Wyche and Robert West, each of the salary of 3 Pags a month. We are assured, Mr. Wyche is excellently well skilled and both had a long experience of Pharmacy as well as Surgery but whether he or Mr. Munro shall succeed Mr. Robson in case of his death or departure, is left to your direction, as you find either best deserving as also whether Mr. West shall stay at Madras or go down to Fort St. David."

On 15th September, 1718, Duncan Munroe, Surgeon's mate, of the Hospital requesting to be permitted to go to England, was discharged from Company's service. "Samuell Raworth, who came out a soldier, by the last ship (1718) was entertained as Second mate of the Hospital at 3 Pags. per month, he having been educated that way." Duncan Munroe started off as Surgeon of Ship Success but was cast away and as one of the chief survivors returned to Madras next month, *i. e.*, October and submitted a very detailed report on the circumstances of the ship wreck.

It has not been possible to trace the names of the Surgeons' Mates between 1718 and 1724. The letter of the Surgeons representing that no assistant was available in the Hospital for the coming sick season of 1725 has already been quoted. Ramsay acted as mate at 10 Pags a month for part of a year, before he fell sick. Mr. Lindsay quitted his employment as Surgeon of the Ship 'Lyell' and submitted to be Surgeon's Mate. In 1726, he petitioned offering his services as Doctor's mate of the Hospital. "Mr. Ramsay of the Garrison having

been for sometime ill and continuing incapable of acting, I beg leave to offer myself to act as mate during his illness with the usual salary and allowances."

Andrew Munro, who was for a short time Surgeon's Mate at Fort St. George in 1724, was again at Madras sometime before 1733, when he was ordered to go to Fort St. David. Robert Turing became Surgeon's Mate about this time and continued at Fort St. George till 1737, when he went down to Fort St. David for a short while, and returned. By 1738, there were therefore definitely two Surgeons' Mates, as the following extract shows:—

"Agreed also that Mr. William Douglas who returned on the WAGER be restored to his former station of Surgeon's Mate of the Hospital and that Mr. Robert Turing who has officiated very diligently in that capacity here during the other's absence as well as for sometime before, at Fort St. David do continue to act as another Mate at the allowance of 10 Pags. per month, for that it has always been *usual to have two Mates* here when we could get proper persons, that the present sickly season requires it, and that we may not be in want of a person of that profession to supply any vacancy that may happen at the subordinate settlements."

A despatch to England dated 1741-42 describes how the hospital was without even one Surgeon Mate at that period:—

"But having sent Mr. Turing who was one of the Surgeon's Mates here, to be Surgeon at Vizagapatam and Mr. William Douglas, the other mate here, designing to

quit his employ, as did Mr. Macknight at Fort St. David in August last, we shall not have one mate either here or at Fort St. David and *our seasons are sometimes so Sickdy that great attendance is required in the Hospitals as well as among the innhabitants.* We shall, if it be possible, get some assistance out of next year's shipping, but *the pay and allowance are very small,* and it was perhaps only the hope of succeeding on a vacancy which induced Mr. William Douglas and Mr. Macknight to act as a mate so long as they have done and we are therefore to desire your honour's care and consideration of us in this respect".

The next change in the staff of the Hospital is mentioned in a consulation dated September 1743. "The very bad state of health Mr. Macknight our present Surgeon's Mate has long laboured under having determained him to go for Europe in January next, if he gets over his present indisposition which is much to be doubted, and there being in the place two persons of that professions who are willing to engage in the service, namely WILLIAM LYON and JOHN SHEAFE; it is agreed to entertain them from the 1st of next month, *Lyon as first, sheafe as second mate of the hospital.* Agreed also that pursuant to the liberty granted us in the 6th paragraph of our Honorary Masters commands of the 11th March last, and in consideration of the nature of that service, their pay be increased from 10 Pagodas to 15 a month each and that Mr. Sheafe who has assisted in the Hospital from the 10th of this month be paid at that rate." In 1745, mention is made of the

entertainment of a new Surgeon's Mate. "Stephen Lightfoot, a Surgeon (formerly of Ship Benjamin) having assisted for sometime in the Hospital and being willing to enter as a Mate, it is areed to entertain him as such, at the usual allowance of 15 Pagodgs a month." He was actually entertained on 12-10-1745. In an entry dated 1750, it is stated, "Dr. Stephen Lightfoot died sometime past in Bengal."

After the rendition of Madras, from the last quarter of 1749, the post of Surgeon's Mate was filled by James Wilson. In response to the pressing request of the Surgeon, Andrew Munro, a second assistant was sanctioned. In the accounts for December 1750, there is shown, in addition to Surgeon and one Mate, another Mate, Joseph Hinchly, at Pags 15 per month.

A SPECIMEN OF APPLICATION FORM (1723)

To The Hon'ble Nath-Elwick, Esqr.,
President and Governor *etc.*, Council of Ft. St. George,
The petition of Archibald Murray.
Humbly Showeth,

That your petitioner having been but a surgeon in which employ he hath behaved himself to satisfaction as will appear by the dishcarge which Captain Rigby at his request gave your petitioner and being desirous of serving the honourable company which was the inducement that led him to leave ship Enfiled. Your petitioner therefore humbly prays to your honour *etc.*, will entertain him as a Surgeon for the west coast where he is informed there is a vacancy and as in duty bound,

Your petitioner shall ever pray *etc.*

....

CHAPTER VII

Surgeons' Lodgings, Duties and Priveleges

SURGEONS' LODGINGS

A very early proposal to build quarters for the Surgeons of the Hospital is contained in the memorandum on the reorganisation of Hospital by Dr. Bulkley in 1698. When the new Hospital by the Riverside was planned, provision seems to have been made for "necessary lodgings" attached to the Hospital. After the year 1720, references occur to two lodgings of the surgeons, one at the south end and another at the north end of the Hospital. Later still, even the Surgeons' mates seem to have been provided with accommodation in the Hospital premises, as can be gathered from the letter of Dr. Munro, in 1750, describing the altered conditions due to congestion after the rendition of Madras. Dr. Munro was compelled to rent a house in Choultry gate street and the Council sanctioned a house-rent allowance of 8 pagodas a month. The surgeons' mates were not given any allowance. The surgeons seem to have continued to live in rented buildings during the years from 1750.

The extracts indicate the type and the cost of repairs to the Surgeons' Lodgings during the years 1720 to 1746. In 1726, the Paymaster submitted a report of the sundry small repairs necessary for Doctors' lodgings.

"Sir,

Dr. Ramsay having complained to me that the surgeons' lodgings at the south end of the Hospital being so much out of repair that he cannot come into them and therefore he is obliged to be at the expense of house rent, I thought it my duty to take the head carpenters and see what is necessary to be done to it and report the same to your honour as near as we can with a calculate of the cost which is as follows" :—

There are seven windows and nine doors which want to be all new painted. Five of the said windows want also to be new rattanned, to do all which will take up.

			Pags.	
I. For painting.				
Linseed oil	...	Five gallons.	2	28
White lead	...	One mond.	1	27
Indigo	...	Five viss.	0	35
Mooches	...		1	14
Red earth	...	Four viss.	0	8
II. For retanning five windows.				
Rattans two bundles			0	24
Rattan cooly			0	30
		Total	8	22

The old stairs are entirely rotten and useless, must be taken away to make which good again and to give a small repair to the well, cook-room and necessary house.

	Pags.		
Red wood for the well.	1	0	0
Some plank for the stairs *etc.*	12	0	0
Smiths, Carpenters, Bricklayers, Coolis and Boys	10	0	0
Chinam, Jaggery pots, *etc.* for plastering and white washing.	3	0	0
Emptying the necessary house.	0	20	0
	25	20	6
Total	35	6	0
The painting of the other surgeons' lodgings at the north end will amount to much above the same.	7	4	0
White washing about	3	0	0
	10	4	0
Total	45	10	0

In the accounts for extraordinary expenses for February 1726, there is an entry under repairs to fortifications *etc.*

"Repairing the south lodging of the hospital Pags. 40-30-20."

In the accounts for March 1738 the following entry is recorded under repairs to fortifications :—

Doctor Douglas Apartment	PAGS.
Materials	6 3 42
Workmen	7 11 20

In the account for April 1738, the extraordinary expense is explained as due to various things amongs which is mentioned :

Reqairs to Doctors' lodging :—	PAGS.
Doctor Barlow and Douglas their apartments	7 20 19

In may 1738, there is an entry :—

Doctor Barlow's lodgings	3 21 59

Similarly, the extraordinary expense in December 1738 was due to :—

	PAGS.
" Dr. Barlow's lodgings, Workmen and materials	4 13 60

The only entry regarding repairs to Doctors' lodgings just before the Anglo-French war and the siege of Madras occurs in November 1743.

Mr. Barlow's lodgings, stopping cracks in the terraces. Pagodas 1 6 0

In the middle of 1750, MUNRO addressed a letter to the Council which is an important document, showing

the condition of the Surgeons lodgings and prayed for house rent allowance.

"I must beg leave to lay belore you, the *state of the hospital in* order to show the necessity I am under of hiring a house, or proper lodgings. Upon Admiral Boscawen's taking possession of this place, in August last, *the hospital was, and is so much crowded ever since, that there has not been proper room for the sick,* so that the usual *appartments for the mates, have been taken up by them by them.* One of the surgeon's lodgings the Officers have possessed ever since; the *other apartment,* I mean the late Mr. Barlows's being immur'd and straightn'd by the French, in fortifying the place; so that, there is hardly room for the two Assistants; therefore I must request the favour that some allowance may be made me for house rent which I now pay the Hon'ble Company themselves."

SURGEON'S DUTIES: CARE OF THE PATIENTS

The duties of the Surgeons though primarily concerned with the medical aid to the settlement appear to have been multifarious and almost unlimited in scope, ranging from purely chemical laboratory work like the preparation of "Aqua fortis" for the use of the "Assay Master" to the other extreme of supervising, along with other factors, the opening of the barrels of cochneale.

The doctors at Fort St. George had two distinctly different fields of activity in the treatment of the sick and the wounded. From 1664, the Hospital may be said to have taken up most of their time and attention.

The patients either in the Hospital or those attending the Hospital as out-door patients were daily increasing in number. Most of the cases seem to have been medical, acute or chronic. Only a few accident cases and still fewer surgical cases are mentioned in the records.

Then, there were the invalids or wounded people who remained in their houses and had to be attended to, by the doctors of the Company. The amount of work of this type, must have varied from season to season. Dr. Bulkley's request for "Pallakin allowance" to cover the expenses of his frequent and long visits to many patients in the White Town suggests that he must have had a considerable number of patients to be visited.

In addition to the Company's servants, sick or wounded, the Doctors had to occasionally attend on some distinguished visitors to Madras that came in search of Healers and health from the Courts of the Native Princes. There is at least one allusion to the Surgeon of the Fort St. George being deputed to attend on one of the Company's merchants, when wounded.

LOCAL PURCHASE OF MEDICINES

Naturally, the doctors at Fort St. George had to maintain a good supply of medicines for the treatment of the numerous medical ailments. In the early stages of the Fort St. George, the Company sent chests of Surgery or chests of Medicine to the Coast or to the Fort and the Council generally directed the chests to be handed over to the Surgeons who were expected to verify the drugs (quantities and qualities). When the

supplies of medicines were inadequate or when the stores were exhausted before fresh supplies arrived, the Council made arrangements for the immediate needs by either purchasing chests available locally from doctors or laymen or by buying in the local market such drugs and quantities as were needed. The Surgeons had to inspect the chests offered for sale and value them. In the case of local purchases, the doctors had to either prepare a list of drugs required and submit it to the Council for sanction before purchasing them or purchase these articles urgently required and then submit the list with bills, to the Council for payment. These bills are arranged and reproduced in the Section on Medicines. Only one specific regulation relating to the submission of these bills may be entered here. Till 1697, the medical officers were in the habit of buying drugs in the Bazaar for the use of the Hospital and submitting the bills at long intervals—a large consolidated bill covering a period of two or three years. Each of the two surgeons made his own purchases and presented his bill separately for payment. In 1697, the Council ordered that for the future, "the Doctors do produce their bills monthly." Next year, the Council noted that the surgeons were not sending the bills monthly and directed the Paymaster to "acquaint the surgeons that they bring in the bills monthly; otherwise they will not be paid."

Distribution of medicines to other subordinate stations was also occasionally done by the surgeons. After purchasing chests available locally they had to

supervise the packing and despatch of drugs to these out-stations. Now and then, they had also to provide Company's ships with drugs and once at least, they were asked to replace the medical stores of a ship, which expended some of the drugs on the sick soldiers intended for the Port.

In time of great danger to the Fort, as when threatened with a siege as in 1687, the Doctors were allotted the following special charge "To provide and make salves for wounds and to be as sparing of the small chirurgery box in the "Rebecca" as they can, that we may not want upon great occasion."

INDENTS AND STATEMENTS TO BE SENT

The Surgeons had to prepare lists of drugs and instruments wanting in the Garrison of Fort St. George 1½ years in advance and send them by ships to England.

The Surgeons of the Fort had to submit to the Company in England every year attested lists of persons who have died under the care of the surgeons with their distempers every year. Statements recording such deaths from January 1st to December 31st, were despatched by the earliest ship to England during the decade 1740-50.

"MEDICO-LEGAL DUTIES"

The surgeons were not infrequently called out to discharge medicolegal duties. Examination of sick persons and wounded men was ordered by the Council. John Nicks was released from prison on medical grounds

on the strength of a report from Dr. Bulkley. Dr. Bulkley was also ordered to view the wound of a Portuguese soldier attacked with a sword by Lt. Seaton.

The first postmortem in the South India for medico-legal purposes was also conducted by Dr. Bulkley according to the orders of the Council at Fort St. George. In 1693, James Wheeler died of a dose of physic inadvertently pounded in a mortar used for Arsenic. Bulkley held an autopsy and reported that though little could be gleaned from appearances, the symptoms before death pointed to poison. In 1678, when as a result of being tied up " neck and foot with hands behind and knees on shoulders." Thomas Savage died, the Governor ordered the body to be inspected by Factors and Surgeons. John Waldo and Bezaliel Sherman, viewed the body and wrote as follows :—

> " We underwritten being immediately to assist there about said Thomas Savage found him dead and apparent marks of his binding about his neck, which we judge to be the cause of his death."

PROFESSIONAL PRIVILEGES AND RIGHTS

The privileges and rights of the surgeons were not inconsiderable. They were allowed *private practice both among the employees of the Company and other residents of Madraspatam.* In the middle of the 18th century, Company introduced some new regulation regarding the use of drugs for private patients. The whole correspondence on this subject is printed in the section on supply of medicines. They were allowed to accept fees

for professional attendance and presents from Nawabs or their Generals.

Each Surgeon was allowed to bring with him and *train up an apprentice.* He could also certify and *recommended these apprentices for appointments* as surgeons' mates or surgeons of the ships. Entries alluding to this privilege and such appointments are listed in the chapter on surgeons' mates.

By the end of the first quarter of the 18th century, the Honourable Company seems to have allowed to the surgeons of Fort St. George the privilege of *examining and selecting candidates for the post of a surgeon at subordinate stations.* Duncan Munro and Pitchier examined, Archibald Elliot, a surgeon who offered his services to go to the west coast and found him to be capable of such employment. The Council thereupon agreed to entertain him.

CHAPTER VIII

The Medical Profession—

PAY AND PROSPECTS OF SURGEONS

Neither the pay nor the allowance of the surgeons can be said to have been adequate or tempting, in the early days of the hospital. About the year 1677, the surgeons of the Fort, John Waldo and Bazaliel Sherman drew a pay of £ 30 per annum. At least, in this one instance, the Company consented to pay the surgeons during what may be called the joining time. In May 1677, the Council at Fort St. George passed the following orders:—" Upon the address of the two surgeons of the Fort, it is ordered that the wages of the said surgeons, John Waldow and Bazaliel Sherman from the time of the departure from Gravesend of the ships they came by until the time of their landing here be paid to them by the Purser." John Heathfield was engaged in 1680 on a salary of £ 36 per annum. But again in 1686, Samuel Wilmont and Plummer were paid only £ 31 s. 10. The pay was subsequently fixed at £ 36 per annum. As late as 1761, when the Council proposed to increase the pay of the surgeons the Company wrote back from England disapproving the proposal. " The surgeons that we send abroad to our Capital Settlements are always acquainted with this salary and emoluments and we find no difficulty in having able men of that profession as well as all other branches of our service. If their heads are turned, give us due notice, that we may call them home again

and supply their places with men of more humble minds, though perhaps not inferior talents. This answer may serve you for all others who are dissatisfied with their employees and employers."

HOUSE RENT ALLOWANCE

It is not clear whether the Surgeons had allowances in the very first decade of the Hospital. As they were probably living in the Fort House and having their food at the common mess table no allowances were probably necessary but when Bezaliel Sherman arrived in 1676 with his wife he had to rent a house and stay there. The Surgeons, if they happened to be married men, were therefore given an allowance of 2 Pagodas as house rent and another 4 pagodas as diet allowance. A Consultation dated 1693, ordered the Paymaster to pay to Dr. Bulkley "Pagodas 4 for the rent of the house at his first arrival here, when there was no room in the Fort for him." Later, Dr. Bulkley begged for an increase in the allowance for house rent and the Council sanctioned the rest of the house rent as a recognition of his extraordinary services. In 1714 Dr. Robson was paid Pagodas 50 as allowance for house rent for 12 months during the building of the new hospital. When the new hospital was completed in 1714, it had lodgings for the surgeons, one at the north-end and one at the south. The house rent was then probably discontinued. After the rendition of Madras when the hospital premises and the Surgeons' lodgings were occupied by the Adjutant and other Naval Officers, Dr. Munro had to rent a house

at 10 pagodas per month, in the choultry gate street. He therefore again appealed to the Company for an allowance of house rent and the Council sanctioned 8 pagodas per month as house rent.

DIET ALLOWANCE

The diet allowance has already been mentioned. It was 4 Pagodas per month from 1677. During the eighties of the 17th century Dr. Heathfield had 5 Pagodas a month. But in the year 1698, diet allowance seems to have been discontinued according to orders of the Company. About 1706 the diet allowance was raised to 6 Pagodas and later still, the higher rate, 8 pagodas a month, usually allowed to Church Minister, was also extended to the Surgeons.

DOCTORS AND DRINKS

Doctors were in the habit of getting occasionally " one hind head " of beer from England. The Company itself seems to have sanctioned a limited allowance of wine and arrack to Company's servants at Fort Marlborough. The Surgeon was once allowed 30 bottles of wine (Europe liquor) and 9 bottles of arrack. There is no record of any such allowance to the Surgeons in the Fort. St. George. But when they had a common mess table for all the covenanted servants, the Surgeons also must have shared the supplies from home. The Doctors, were, however, recipients now and then 1, of a present of a quantity of Europe liquor. It is recorded in a consulation dated 2nd September 1695, that out of the "Butt off

sherry" received in Fort, Doctor Brown was given "15 gallons for his share and use."

It was also a common practice for the surgeons to purchase wine at the public outcry in Madras. Doctor Lindsay purchased one pipe of Madeira wine for 47 Pags. in August 1730. Dr. Munro purchased Madeira wine (one pipe) and old wine (one pig head) in 1733. Robert Douglas bought 2 pipes of Madeira wine in 1737 and another 2 pipes in 1738. The price of two pipes ranged from 47 Pags. to 57 Pags.

OTHER ALLOWANCES

Heathfield seems to have been in receipt of many allowances, such as a *horse allowance* of 50 Panams per month, a diet money of 5 Pagodas per month as mentioned in the following report submitted by Mr. Empson in January 1698, in connection with the question of granting similar allowances to Dr. Bulkley.

At a Consultation dated 3-1-1698, it is recorded that "Mr. Empson: Now in persuance of the order of Consultation 23rd past, produced his report of the allowance and assistants formerly allowed to Doctor Heathfield as entered in the Paymaster's accounts"; "Ordered that in persuance of the 55th paragraph of the Rt. Hon'ble Company's General letter by the "Tavestocke" Doctor Bulkley be allowed as followeth:—

Oyle	...	11 measures per mensem.
Wax	...	5 pounds.
One Dubash	...	Pagodas 1. 0 fa.

Duty Fellow	...	,,	0. 12 fa.
Washerman, Barber and water	...	,,	0. 10 fa.
One mate at	...	,,	5 per mensem.
One assistant	...	,,	3 ,,
Salary at	...	36 pounds per annum.	

The Consultation also added "Besides which Doctor Heathfield had fanams. 50, per mensem for keeping a horse and 5 Pagodas per mensem for Diet money, which are not to be allowed because they are both contrary to General Orders of the Rt. Hon'ble Company." An entry relating to Fort St. David in the year 1691 gives the following table of allowances:—

	Wash.	Peon.	Diet.	Servant.
For Surgeons:	Pags. 0–40	1	4 pags.	1 pag.

The allowances are less than those for the Minister or for the members of the Council but more than the rate for merchants, factors and clerks.

There is only one reference in the first half of the 18th century, to a *palanquin allowance.* "January 4th 1704—Doctor Edward Bulkley complaining that the married men who are soldiers living straggling up and down the Black Town makes it impossible for him to look after them in their sickness without being at the charge of a Pallankeen and often urging that the same is allowed in all other parts of India which we believe to be so; so considering the reasonableness of his request have agreed that he be allowed four pags. per

mensem towards the charge thereof to be paid by the Paymaster."

Travelling allowances to Doctors were also sanctioned. When Dr. Belches travelled to Fort St. David in 1742, he was paid 10 Pags. in the account of Fort St. David. In 1745, again, under the account of Fort St. David it is noted "Doctor Barlow's travelling charges, 10 pagodas."

From the later quarter of 1749, entries relating to the pay and allowances, are once again frequently noticed in records, as shown by the following statement of General account :—Payment of covenanted servants in Company's service at Fort St. George at the end of the year 1749 :—

Andrew Munro, Surgeon :

Pay	Pag. 36.
Diet money per mensum	Pag. 8.
Pallankeen	Pags. 4.
Servants wages	Pags. 1-20-0.
Candle, oil, *etc.* per mensum.	Pags. 1-20.

James Wilson, Surgeon's Mate :

Pay	Pags. 15 per mensum.

In addition as Steward of Hospital, Pags10 per mensum

PAY OF SURGEONS' MATES

The pay of the Surgeons' mates was 120 fanams (£1-10-0) per annum in 1677. Later, in 1698 the

monthly pay of the mates and assistants stood at 5 pagodas and 3 pagodas respectively. At a still later stage, about 1725, the pay of the surgeon's mate is recorded to be 10 pagodas per month. In 1743, this was further increased from 10 to 15 pagodas a month. There was however no additional allowance either for diet or house-rent.

OTHER SOURCES OF INCOME

Apart from these small allowances, the surgeons seem to have had other sources of income from private practice, when occasions arose to attend on the Nawabs of the Carnatic or from farming villages granted to them or sometimes even by private trade. An interesting passage from Salmon's description of Madras (1699-1700) may be quoted in this connection "The surgeon or Doctor of the Fort has about forty pounds per annum salary but he had so many ways and means besides of replenishing his pockets that he cannot well avoid acquiring a handsome fortune."

"DOCTORS AS TRADERS"

It will be seen at a later stage that the Doctors of the Hospital were also in the habit of acting as contractors for Hospital supplies.

The Doctors may be said to have benefitted by trade in various ways. Some of them owned ships by themselves or jointly. Others subscribed the general stock. Almost all of the Doctors derived the full advantage, concession allowed by the Company to its

employees, *viz*: to import certain articles and in certain quantities, free of freight for their own use or for selling at a profit. The Doctors in particular were at an advantageous position in getting and disposing of chests of Medicine and chests of Surgery.

The Doctors seem to have had some *private trade.* As early as 1687, Dr. Plummer was trading in grain "Doctor Plummer and Thomas Constable loading Royal James with several sorts of grain (rice), incurring loss due to delays and the Council, in consideration of their loss, and also in view of the dangerous times and scarcity of grain, purchases the whole lot by giving 10% advance over the invoice."

Among the articles that came by the ship 'Good-fellow' and belonging to private persons was one small packet of gold costing 47 pags. intended for Mr. Munro. In the account of silver delivered by the Company's galleys there is an entry. "D. M. No. 1. 2,044 ozs. to Dr. Dunkan Munro." Dr. Andrew Munro was part-owner of the ship 'Fanni Brigantine' in 1742.

DOCTORS AS INAMDARS AND LANDLORDS

Dr. Brown and Dr. Blackwall leased extensive anas-town and villages, around Madras from the local Nababs, and seem to have augmented their income by farming. (Details are given elsewhere in my articles.)

PRESENTS AND BEQUESTS

The Surgeons were not prohibited from accepting presents. Dr. Bulkley was the recipient of an emerald

ring worth about 20 pagodas from the Nabab in 1706, when he accompanied an English mission.

There are also indications that the Doctors benefitted by some wills. Here are a few examples :—

John Perry, a merchant of Fort St. George, 'in sound mind' made in 1719, his last will and testament, in which he gratefully acknowledges the services of the doctor :—"Thirdly, I give unto the Doctor for his diligent care and trouble, 20 pagodas to buy him mourning."

John Turten made a will in 1720 bequeathing 25 pags. to Dr. Thomas Robson.

Henry Davy of the same place made a will the same year desiring that the Hon'ble Governor would reward Dr. Pitchier for all his care and trouble, while Charles Davers made a will leaving to Dr. Pitchier the sum of 30 pagodas "in case I die of my present illness and that I did not pay him before I died".

John Acton of Fort St. George in a will dated 16-8-1721 wrote "I bequeathe to my beloved friend Dr. Munro three pagodas for a ring."

Chief Engineer, Robins made a will in 1751 mentioning among others the following :—"I also give and bequeath to Doctor Turing, two hundred Pagodas for his diligent attendance on me in two Fitts of Sickness."

EXEMPTIONS AND HONOURS

The Surgeons were also privileged persons in many ways. The Council exempted them from acting as

Aldermen of the Corporation of Madras. The Presidents honoured them by *inviting them to dinners* on certain occasions. The Company occasionally distributed *wine and sherry for the personal use of Surgeons.* Dr. Heathfield travelled in a Pallakin all the way from Madras to Masulipatam. Mrs. Brown (wife of Dr, Samuel Brown) travelled between Madras in a pallakin escorted by peons on horse. Dr. Bulkley was given a Pallakin allowance to visit his scattered patients in the Town. Dr. Munro purchased a horse for his own use. Doctors of the Fort also acquired houses and gardens which for some years subsequently remained famous landmarks in Madras.

Dr. Bulkley had also been appointed as Coroner "And in respect to him we are willing to allow the office of the *Coroner*, and such perquisites therewith for sitting on the bodys of any persons that shall come to any untimely end by casuality or otherwise, as you shall think fitting, to be paid by the relations of the deceased, considering the poverty of the Generality of your Inhabitants. The usual fee here is 6 s. 8 d., but Wee think two Rupees is sufficient where the persons are of Ability."

In 1698 the Company permitted Dr. Bulkley to be appointed *Justice of the peace* and added "We doubt not he is capable and honest."

Thomas Robson was one of the executors of the Estate of some of the persons who died in Madras in 1718. He was also one of the Overseers of the Church School in Fort St. George about the year 1716.

WEALTH AND PENURY

Some of the Surgeons and Physicians acquired decent fortune. Doctor Edward Bulkley paid into the Right Honourable Company's cash a sum of 1000 pagodas at interest at 8 per cent per annum in 1703.

There were others who got deeply into debts. After the death of Dr. Ramsay, the question arose whether he made any will. The Council ordered Paymaster and Secretary to examine the papers of the deceased to clear this doubt. None was discovered in the papers. On enquiry, Dr. Pichier gave them this information. On approach of death, Pitchier put Ramsay in mind of making a will, but Ramsay answered "what signified a man making a will that was in debt?" Later, a letter from Calcutta disclosed that Ramsay had also taken small diamonds of Mr. Magjee of Calcutta. He was also indebted to several people among whom was one Doctor Thomas Edmonstone, who had a bond for £138, and John Lodder to whom Ramsay owed 250 Pags.

DOCTORS FINED AND JAILED

The Doctors were not always angels. Doctors Barlow and Douglas appointed Aldermen for the town of Madras in 1734 did not accept the employment and were therefore fined by the Mayor's Court. They prayed to be released from these employments and applied to the President and Council for relief of fines. Both the requests were granted. Dr. Brown and Dr. Blackwall were charged with duelling and remanded into custody.

BAD CHARACTERS

Some doctors were notoriously bad characters, while a few others were drunkards.

CHANGING THE PROFESSION

Just as many who came out to India, as ordinary soldiers represented that* they had taken training under Surgeons in the art of Surgery and changed their profession, some surgeons and surgeons' mates also gave up their profession when they found some other employments more remunerative and tempting. Another very interesting fact is that among the people who enlisted as soldiers in England and came to India in Company's ships there are some whose profession was originally recorded as "Surgeon" or "Appothecary."

CHAPTER IX

Provision of Medicines, and other Medical Needs

"CHESTS SENT FROM ENGLAND"

In the early days of the Company's Settlement at Madras, drugs, chests of medicines and chests of Chirurgery had to be brought all the way from England at varying intervals. This naturally led to great hardships. Some drugs were completely spoiled by the time they reached their destination some chests were rifled and pillaged. There were periods when the factory had neither medicines nor plasters till the arrival of the next ship. When the Medicine chest or drugs expected from England did not come or the stores were exhausted before the arrival of fresh supply, the immediate needs were provided in two ways. One method was to make arrangements to buy any chest of physic or surgery available for sale with local persons or as the private property of the doctors themselves. This was not always possible. Therefore the Council, with increasing knowledge of local conditions, cautiously began local purchase of drugs as and when necessity arose. The following entries and extracts are reproduced to show the type of supplies from England. The Company used to send chests of medicines or chests of surgery by ships coming from England. Generally seperate boxes were provided for Fort St. George, as distinct from the

supplies to the other Settlements. Ship 'Falcon' leaving England in December in 1675 brought to Madras 'Medicines.' "New London" starting in December 1676 brought to Fort St. George 2 chests of Surgery valued at £ 65/- while the ship 'Bengal Merchant' carried one box of medicines valued at £ 5/-. Again, next year, another ship leaving England brought to Madras 2 "chests of chirurgery," valued about £ 80/-. Ship 'Society' arriving in the latter part of 1678 brought one chest of surgery. Ship 'George' reached Madras in June 1679 bringing one chest of surgery for Madras. Usually, chests of medicines or chests of surgery arrived by ships coming from home. Separate boxes were provided for Fort St. George, Fort St. David and to Bengal, as the following entries show :—

"17-10-1687 :—Goods taken ashore from 'Ship Resolution' before it left for Bengal and Arakan :—"2 Chest of Medicines."

The Council themselves provided from the ships some chests to Fort St. George. On 25th July 1697, the Council ordered that "the box of necessaries for the chirurgeon with the two chests of medicine for this place" be delivered to Dr. Bulkley. In 1701 ship 'Colchester' brought a chest of medicines. In the early part of 18th century, every ship that carried chest of medicines brought a paper called list of the medicines and keys.

28th July 1704. List of the packet to the Fort per 'Martha.'

Item No. (11) Invoices of medicines to be sent in a packet.

Item No. (13) Keys of the medicines in the box apart, 3 No. A. for Fort St. George and 3 No. C., for Fort St. David.

15th August 1706. List of packet to the Fort by the 'Tankerwill.'

Item No. (12) Invoice of medicines for Fort St. George in the chest.

Item No. (13) (Keys) of the chest of medicines for D. fastened to the chest.

Item No. (14) Invoice of medicines for Fort St. David in the chest.

Item No. (15) keys of the chest of medicines for D. N. fastened to the chest.

Account of goods received from ship 'Jane' delivered at the consultation dated 2-6-1712 contains the following items, enabling us to have an idea of the cost of these chests.

Chests and casks of Medicines *Viz.*

No. M. B. 1 One chest for Bengal at £ 60/-.

No. 1 One ,, for the West Coast at £ 30/-.

No. M. E. D. One chest for fort St. David at £ 35/-.

No. 2 One cask of drugs at £ 30/-.

There were also small boxes of medicines - 4 boxes costing only £ 20/-.

Sometimes the Council at Madras took ashore chests of medicine from Ships going to Bengal and other places, though these chests were not intended for this Factory. They took two chests of medicines from ship 'Resolution' in October 1685. Again in February 1704,

despatch to England mentions "Have detained the physic chest by the Tavistock—though directed to the Bay: the doctor complains of the ill packages of the physick chests." In 1709, the Council wrote "due care being taken of all that are sick: the Governor looks after it and supplies the doctor at his own expense as well as the Company's stores."

IMPORTED CHESTS AND MEDICINES, BOUGHT LOCALLY

The purchase of medicines or chests offered for sale by private individuals was a frequent occurrance and the practice may be illustrated by the following extracts:—

Consultation dated 24-2-1687:—"Captain Thomas Batten, Commander of Rebeca, having brought out chest of chirurgery for sale and not knowing what occasions we may have of medicines in case of a seize, having received a supply of but one small box this year from the Rt. Hon. Company, it is ordered to be bought for use of this Garrison."

There is an entry dated 15-9-1687 when the Council of Fort St. George ordered that the "Chest of physick" of James Birley, lately Surgeon of the ship Rose, may be purchased as they were in great want of medicines, there being no medicines sent by last shipping. The chest was examined and valued by Dr. Heathfield at 50 pagodas.

Consultation dated 5-7-1688.—"The Rt. Hon. Company not having sent out any physick for use of

this Garrison, and a good chest offering to sale it is ordered that the Doctor do view it and report its condition and price to the Council and that it be bought as reasonable as possible, there being great necessity for it for the soldiers, brought upon the Princess (ship)."

In 1692, it was ordered " there being a great want of medicines in this Garrison and Fort St. David and Mr. Barwel having brought some fresh good drugs from Persia, the Doctors are ordered to examine and buy them."

The Council of the Fort St. George seems to have been eager and watchful to obtain possession of such chests.

In June 1711, the Council ordered Dr. Bulkley to take an inventory of Mr. Chadsley's goods and dispose of them at a public outcry " except the medicines which Mr. Bulkley is desired to value and take for the Company's use."

Once, the supply of medicines failed on account of the loss of ship in 1722. " The President informs the Board that the Doctors have frequently acquainted him of the want of medicines in the hospital occassioned by the loss of the "Nightingale", the annual supplies for the most part being upon her and that there is a parcel in this place, amounting as per invoice £ 119 sterling, it is therefore agreed that the same be purchased allowing 25% advance and that the amount thereof be paid for out of cash."

In 1687, when the Council at Madras was preparing for the Moghul attack on Golkonda nd its provinces,

they got a loan or arranged a transfer of certain instruments to the Fort.

"There being a set of large Chirurgeons instruments at Machlepatam, which may be useful here, upon any expedition, it is ordered that Mr. Freeman be wrote to sent them hither."

"MEDICINES FROM LOCAL MARKET"

The following extracts are added to give an idea of the bills submitted and the cost of medicines purchased from time to time in the local market:—

7-6-1688.—"The Chirurgeon delivering in a list of medicines wanting in the hospital, it is ordered that they be bought, at as lower price and as few as possibly, being in expectation of Europe ships."

The first medical contingent bill for local purchase available in the records. 13-5-1689. "The Paymaster is ordered to pay of the Surgeons' bill for medicines brought out of bazaar for the last months."

14-10-1690.—"The Surgeon delivering bills for 5 months expenses in the hospital, the Paymaster is ordered to peruse them and discharge."

1691.—"Doctor Brown delivering in a bill of charges for physick, brought and expended on the sick soldiers in the hospital, the Paymaster is ordered to examine it and discharge the same."

17th August 1693.—"The Chirurgeon of the hospital producing a bill of drugs and bought in the bazaar for 6 months ending July last, amounts to Pagodas 14 : 24 : 3.

15th March 1694.—The Paymaster is ordered to pay the bills of drugs bought in the bazaar by the Chirurgeons from the month of February 1693 to January 1694. Pagodas 24 and for the months of August, September, October and November last, for the hospital use. Pagodas 15 : 25 : 4.

8th December 1694.— Ordered that Pagodas 42 : 13 : 13 be paid by the Paymaster to Doctor Bulkley being so much expended by him for drugs and other necessaries for the hospital, from the first of December 1693 to the last of October 1694 as by his accot."

2nd July 1695: ordered that the Paymaster do pay Pagodas 11: 7: 26 to Doctor Brown, being for drugs bought by him from the bazzar for eight months as per his account now (delivered.)

31st August 1696: Doctor Brown presenting a bill amounting to Pogodas 19: 22: 48 for drugs bought in the bazzar for eight months ending July last. The Paymaster is ordered to pay the same.

14th June 1697: The Paymaster is ordered to pay Doctor Bulkely's bill for drugs &ca, bought in the bazzar for the use of the hospital from the first November 1694 to the last of April 1697 amounting to Pagodas 18: 4: 4 and that for the future the Doctors do produce their bills monthly.

26th July 1697: The Paymaster producing Dr. Bulkley's bill of drugs bought for the use of hospital for the months of May and June last amounting to Pagodas 10: 2: 30. He is ordered to pay the same.

16th February 1698 : Ordered that Pagodas 10:7fa. 58ca. be paid to Dr. Brown being for drugs bought by him in the bazzar for seven months ending November last.

4th April 1698 : Ordered that Pagodas 42-0-0 be paid to Doctor Bulkley being for drugs &ca., bought in the bazzar for the months of July, August, September, October, November, December, January and February and that the Paymaster do acquaint him that he bring in his bills monthly, otherwise they will not be paid.

11th June 1701 : Ordered that the Paymaster pays Dr. Bulkely sixty Pagodas being for medicines provided for hospital in February last.

It is only occasionally, as in April 1711, that a list of medicines urgently required for the Hospital was submitted in advance requesting the permission of the Council for the local purchase. "Mr.......is desired to assist Mr. Chadsley in the procuring what he shall think necessary of them to serve the garrison until the Europe ships may arrive." These lists of local purchase and bills are scarce in the 18th century. In explaining the monthly account for September 1720, it is explained that additional and extraordinary expenditure of the month was due, among other items, to "Bazaar physick" paid as per Dr. Pitchier's note—Pagodas 6-18-0."

MEDICAL SUPPLIES INDENTED FROM ENGLAND

Normally the Company sent chests of "chirurgery" and chests of medicines along with other supplies from England for the use of the Factories on the coast.

Sometimes, the Factories asked for these supplies. A list of things wanting in the Fort—general indent for Home Stores—was sent to England in January 1669. The following interesting extract is taken from this early general indent:—

"What medicines now come out spoiled.

Garden seeds, *etc.*, for physick—Purslen, Lettice, Sparrow grass, Bett Coultsfoot, Scurvy grass, Plantan, Wormwood."

The earliest document of this type that can be traced in the available records occurs in 1695 when a Home bound ship carried a packet of papers which contained "the chirurgeons, his list of medicines to be provided for Fort St. George." But generally the Company seems to have often sent out medicines and chests according to their convenience and choice or may have depended on their local medical adviser to make the selection. Later, the Surgeons of the Fort prepared and sent lists of drugs wanted from Europe and these lists or indents were read in the Council meeting before being sent to London as was done in the year 1706. An entry dated 15th January 1711 notes that Richard Chadsley, Surgeon "produces a list of what medicines are wanting for the use of garrison which is approved of, all of which are ordered to be sent home in the packet as Hon'ble Company direct." Another despatch to England dated October 1712 read "Your surgeons require that for the future what medicines you are pleased to order for the use of this

place, may be divided into 2 chests, one containing 2/3 of the quantity for the use of this hospital, and the other 1/3 for your covenanted servants; because, they practise distinctly and dividing medicines here is hardly to be done as it should be for want of proper things to be put in. Every year, during the period from 1712 to 1745, home bound ships carried packets of papers containing these medical indents called by various names such as " surgeons lists of medicines " " Doctors' list of demands of medicines for the year......" " Surgeons demands for medicines wanting in the garrison of Fort St. George." " Surgeons lists of demands for Fort St. George." *etc.*

There are a few entries relating to observations or suggestions regarding the quantities and the condition of the drugs indented or received. A letter dated October 1705 from Fort St. George to England made the following observations :—" Medicines decay by keeping. Desire only those in Doctor's list. The rest can be got daily at 1/6 of money they cost in England.." Two years later, the request was repeated " Desire medicines only as per list; what generally sent is needless ; now sent none ; were forced to buy a small chest for St. David at 25% per invoice."

In the year 1714 there are two entries stating that the medicines received that year were fresh and good. The Council however prayed for alterations in the method of packing. " Have received two chests of medicine but not in the method desired. Would have each bring same contents as to quality and differ in the quantity."

About 1718, the Company seem to have suggested purchase of drugs in India but a despatch from Fort St. George dated October 1719, wrote "Doctors answer to the remarks about physick to be made up in India; believe the medicines will cost double and not prove so good."

When the chests of medicines were not received in proper condition, reports to that effect seem to have been made by the surgeons. Ship 'Townshend' brought in 1721 to Fort St. George a packet containing, among other papers, the following statement relating to medicines sent from England:—"Copy of Committee of shipping observations and remarks on Dr. Ellis's Report on medicines at Bombay with the answer of Master and Wardens of the Apothecary's Company dated at Apothecarys' Hall—4-3-1718—and signed by John Meres."

MEDIAL CHESTS OF PRIVATE INDIVIDUALS

A short note on miscellaneous matters connected with drugs and chests of medicine may be added here. The Company was in the habit of paying customs dues on "drugs, spices and physick" in two instalments. In the year 1743, for every bag of these articles, 5 panams were paid first and two panams and odd, had to be paid afterwards. Chest of medicine were shipped and imported from England by the employees of the Company—medical or otherwise. Some of these chests were carried free of freight, according to the concessions granted to East India Company employees and were

intended for their own use or for sale at a profit. George Tempest shipped on 'Loretto' "one box containing physick" for his own use in 1725. Among the effects of John Blunt of Ingerum who died in 1728 "a physick box was found in a godown." In 1718, Harrison got 3 cases of medicines for the use of Joseph Collet, President of the Fort St. George Council. Allusion has already been made to the chests sold by Dr. Bulkley and Dr. Lindsay. In 1711, Dr. Chadsley also got a chest from England for his private use and this was later taken over on his death by the Council for the use of hospital. A number of Ship Surgeons and other Company's servants carried along with them as articles of merchandise, free of freight, chests of medicines or chests of surgery. In 1714 Dr. Phillip Dwight transhipped by ship Mary one chest of physick and "a small box with a joyented baby." One is inclined to wonder whether the last item refers to any skeleton as a specimen for museum or for study.

REPLACEMENT OF SHIPS' MEDICINES

Occasionally, replacement of medicines was demanded by ships bringing soldiers or going out on expeditions. In 1720 Thomas Blake, Commander of the ship Crags, petitioned the President and the Council of Fort St. George in May 1720 representing that 30 soldiers were suddenly sent on board his ship just before its departure and as many of the soldiers fell sick on the way during the 9 months, most of the ship's medicines were expended; that he was promised replacement of the medicines

spent, from the chest of medicines of the Company, intended for the West Coast and when these chests were actually delivered, he did not get any replacement of medicines. In 1727, a demand for the supply of stores for the Company's ship Malborough was submitted to the Council which sanctioned among other articles "medicine box one".

"SALE OF MEDICINES TO SHIPS"

It is also interesting to note that, on occasions, the Madras establishment sold medicines to some ships: "16th May 1704......" Dr. Bulkley pays into the Rt. Hon'ble United Company's cash 23 pagodas for physick sold to ship Tavestock being in great want for the same."

PURCHASE AND SUPPLY OF MEDICINES TO OTHER ESTABLISHMENTS

About the middle of the first half of the 18th century, the Surgeons at Fort St. George were also required to make provision for the supply of medicines to Fort St. David and to west coast of Sumatra as the following entries indicate :—

9th September 1703.—"The Deputy Governor and Council of Fort St. David having wrote us for physick and Factories provisions...... it is ordered the same be sent them by boat bound thither this day."

9th October 1703.—"Ordered that the following be sent to West coast 'Medicines—2 small chests.'"

In 1707, Dr. Bulkley had a chest of physick consigned to him from England and he offered to sell it at 25% advance upon the invoice. As the Company wanted one for Fort St. David, it was purchased and sent thither. In 1724, the Council also added "shall buy some chemicals, medicines he (Dr. Wyche at Fort St. David) had." Again in 1728 a similar purchase was made. "Mr. Lindsay presents a bill to the Board for 60 Pags. for a chest of medicine sent to Fort St. David which were obliged to purchase of him, the Company not having sent any out for that settlement and those we have had for this place being but barely sufficient for our own use.........ordered that Paymaster do discharge the same."

When the Fort St. George establishment was asked to supply medicines to other settlements like Fort Marlborough and the stores in Madras were not adequate, the Council usually ordered chests or parcels locally available for sale to be purchased and sent to respective settlements. In 1724, the garrison at Fort Malborough was in great want of medicines. "We not having sufficient for the supply, it is agreed that the surgeons be permitted to buy a parcel that is now in the place and offered to sale, if they be good." These were purchased and an account was produced amounting to pagodas 106-35-40.

LOAN OF MEDICINES FROM FORT ST. DAVID

In 1734, a new procedure was adopted when supply for Fort St. George was insufficient or the full indent sent was not provided. On August 12th of this year, the

surgeons sent in a request that the "warehouse-keeper may be directed to deliver them some of the medicines sent out for Fort St. David, there being none of the same in the supply sent for this garrison."

Hon. Sir,

The medicines this year received from the Hon'ble Company being in several particulars different from the indent sent home, we are greatly in want of several sorts and finding in the Fort St. David invoice of medicines, they have a large supply of some of them, we are obliged to request your honour *etc.*, will direct the warehouse-keeper to deliver us the following particulars out of the said medicines.

Fol. Senas lb. ii. Armen. lb. ii. Camphor. oz....

Rad: Valerian Selves oz. vi.

Phials in sorts. Gross i.

Which is half the quantity sent out for Fort St. David.

N. Barlow. R. Douglas.

A LIST OF MEDICINES REQUIRED

In July 1737, the surgeons again requested leave to take some medicines out of those designed for Fort St. David. They represented that their indents for medicines were not fully complied with that year, and that they were again forced to make this request. The supply for Fort St. David was much larger than for Fort St. George, proportion to the consumption of drugs in the two places. The Surgeons submitted a list, the first one of any length that can now be traced in the Fort St. George records.

To the Hon'ble Richd. Benyon Esq.,
President & Governor *Etc.*, Council of Fort St. George.

Hon'ble Sir & Sirs,

Our Indent for Medicines is so shortly complied with this year, that we find ourselves again necessitated to trouble your Hon. &c. for leave to take out of those design'd for Fort St. David the undermentioned particulars, the supply for that place being much larger than ours in proportion to the consumption.

Aq. Therical	lit. ii.	Styptic Eaton	lit. i.
Emp: eacut 17 am.	ld. ii.	Spir. Corn. Cere	
Diachyl simp	lit. iv.	P se.	oz. viii
Mellilot	lit. iv.	Lavend C	oz. viii.
Paracels	lit. i.	Vin Rectif	ld. ii.
Oxycroc	id. ii.	Sal Armon	lit. i.
de ran 17-810	lit, i.	Menth	lit. ii.
Ung. Basilic	lit. iii.	Nitr. dulc	ld. i.
Nervin	lit. ii	Elix Vitriol	ld. ½
Linim arccei	ld. ii.	proprietat	ld. i.
Bals Sulph. ard	oz. ii.	Ol. Terebinth	lit. ii.
Tereb	ld. ii.	,, Menth	oz. i.
Viride	oz. xiv.	Tinct. Castor Russ	ld. i.
Rez Cort Peru	oz. i.	Sacra	lit. iii.
Gum Guaic	lit. i.	Merc: dulcis	oz. xii.
Tereb Venet	lit. ii.	Calomel	oz. xii.
Commun	lit. iv.	Lap: Infernal	oz. ii.
Pill Russi	oz. ii.	Sal Mirab Glaub	lit. ii.
Rud	oz. iv.	Pulv. Corn. Cerobal	lit. x.
Sem. Carui	lit. ii.	Vials	3 groce
Bolus Verus	lit. i.	Potts	4 D.
Elect Linitu	lit. i.	Pill Boxes	2 papers
Tol Senna	lit. v.	Thread	lit. B.
Hord Gallic	lit. x.	Flannel	5 yards.

We are Hon'ble Sir & Sirs,

Fort St. George, July 27th, 1737.

Your most Obed. Humble Servants,
Nathaniel Barlow. Robert Douglas.

The list deserves close study both on account of the drugs and other requirements of the Hospital as well as for the quantities requisitioned. It may be remembered that these articles are only some, out of those intended for Fort St. David and the supply for that place must have been double or treble these quantities and that Fort St. George, the headquarters on the coast with its bigger garrison and large number of factors and other employees must have been indenting annually and receiving drugs and other druggists' wares somewhat in excess of the supplies sent to subordinate factories like Fort St. David.

INDENTS AND THEIR COPIES

By 1739 the procedure for sending indents for stores and medicines seems to have been regularised. In the records of a Consultation dated 24th January 1739, the following entry is noted :—" Indent for stores and medicines for 1740 signed ; as are several other papers for England." Again, the Consultation on 14th January 1740, mentions " Indents to England for medicines for 1741 signed." Indents were approved and signed by the whole Council. It is evident that indents were sent well in advance being forwarded from Madras in January of every year for the medicines expected in the course of the next year. In 1740, medicines *etc.*, were received from England by the ship 'Colchester' on 30th September, probably in response to the indent sent in January 1739.

A very important despatch from England dated 28-1-1740 stated : " We have taken care to supply you

fully with the medicines indented for, without curtailing any articles but here we must *take notice that duplicates of your indents were not sent* by the Marlborough, which ought not to be omitted in any such material affairs." The result of this warning is evident in the following :—

List of papers Via Benjamin on 9-10-1742. "Duplicate indent for medicines for the Hospital in the Company's account for 1744."

List of Fort St. George Packet to England, via Prince of Wales (6-9-1744) "Indent for medicines for the use of Hospital in 1746."

List of Fort St. George Packet to England, via Durrington, (16-2-1745). "Duplicate indent for medicines for Hospital."

List of Fort St. George Packet to England, via Beaufort, (16-2-1745). "Triplicate indents for medicines for 1746 for the use of the Hospital."

List of Fort St. George Packet to England, via Benjamin (24-9-1745). "Indent for medicines for 1747."

List of Fort St. George Packet to England, via Dolphin (6–10–1745). "Duplicate indent for medicines for 1747."

List of Fort St. George Packet to England via Lincoln (1–2–1746). "Triplicate indent for medicines for 1747."

COST OF MEDICAL SUPPLIES

The supplies of medicines, drugs and "chirurgery" ware, were, sent out from England, in chests, cases,

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boxes, hogs, heads, barrels, casks, *etc.*, and the keys for the chests were kept separately in a box. The invoice of the medicines was separately sent but the value was included in the general invoice, the following extracts serve to show the form, cost and quantities of supplies received :—

Scarborough's invoice to Fort St. George (April 1741).

Medicines. 2 chests 1 case and 3 hogs-heads, £ 203–7–11. The same ship brought in the Company's packet, " key to the medicine chest to Fort St. George and the key for the same to Fort St. David in a box apart," and the invoice of the said medicines.

Walpole's invoice for Fort St. George dated 21–1–1742.

Medicines: 2 chests, 2 casks and 1 hogs-head. £ 114–14–7.

Lynn's Invoice dated 29–1–1742 :

Medicines: 3 chests, 2 casks, 1 hogs-head, and 1 case. £ 228–4–6.

The next year , though the invoice of the ship included the item, medicines, the ship did not actually carry them. They appear to have been sent by the next ship, as shown by the following entry :—

Invoice of Winchester dated 7–3–1743.

Medicines: 1 chest ; 1 hogs-head. £ 52–8–7.

A note is added at the end that the medicines, could not be taken on board the ship. Invoice of Heathcoate dated 17th March 1743 is not available, but the packet

contained: (1) Key of 1 chest of medicines for Fort St. George and, 1 chest for Fort St. David. These in the box apart. (2) Invoice of said medicines.

REMARKS ON THE QUALITY OF HOME SUPPLIES

Meanwhile two important matters came up for consideration. In a Consultation dated 19th January 1741, the following was recorded: "Letter from the surgeons read as entered hereafter accompanying the indents to England for medicines for 1742, which are now signed and reporting the medicines put up by Messrs Silvanus and Timothy Bevan to be much inferior in quality to those provided by the Apothecaries Company and Mr. Alexander Johnston and that in general those sent from the Hall have proved the best." (The actual letter of the surgeons, Nathaniel Barlow and Robert Douglas is omitted.)

There is an interesting report on the drugs recieieved in 1742. "The surgeons deliver in a report of the medicines received by the Princess 'Augusts' from Bengal, being what went thither on the Scarborough representing one of the chests to be entirely spoiled, which they impute to the want of care in packing. Ordered that the said report be entered hereafter."

Sirs,

Upon opening and examining medicines sent out on the Scarborough, the contents of the chest No. 10, provided by the Alexander Johnston, were entirely spoiled,

which we believe to be owing to want of care in their packing.

22nd March 1742.

NATHL. BARLOW
ANDREW MUNRO.

MEDICINES FOR PRIVATE PRACTICE OF COMPANY'S DOCTORS

The other question relates to the medicines and their use by the surgeons for their private practice and occurs in a despatch from England dated 20th January 1742. "We having reason to believe great part of the medicines annually sent out by us, are made use of the surgeons in their private practice, either in the cure of Venereal distempers or among the natives or other inhabitants, for which they are well paid, as also that they are used in fitting up boxes or chests for the country ships, it is therefore highly reasonable the surgeons as they are great gainers thereby, should provide medicines and instruments for these purposes at their own cost."

"We have this year ordered all the medicines indented for, to be sent, of which we have destined part for our own use and the *rest in a separate invoice for account of the surgeons* which we insist on their paying for at the rate of ten per cent advance if they think fit to take them."

"And for the time to come we direct that our surgeons send an indent of medicines for our use in English, and also in the same packet *another indent likewise in English, for the medicines, instruments etc., that they may require for their private practice,* directing

such indent either to our Apothecarys or such others as they may think proper and they shall be sent to them in the same manner that our own are sent, and *we will pay for them and receive the money at your place from the surgeons who indent for them*, or from those who succeed them in the case of absence, to whom they must be delivered at the before mentioned advance."

"You must duly acquaint our surgeons herewith, and also that we expect they take more care of the capital instruments and utensils, so as to make such frequent and great demands for things of that nature, which may last much longer than they do if properly taken care of, and not embezzled, which we apprehend has too often been the case."

"Upon the whole we will not provide medicines *etc.*, for any, but such persons as are actually in our service, whom the surgeons must attend upon and administer our medicines to, without fee or reward, *except in Venereal cases where the surgeons are to use their own medicines and be paid for the cure.*"

"The surgeons at the Subordinate Factorys who do not receive the medicines directly from home must have a responable share of those sent for the surgeons account, on their paying for them as before mentioned."

The reply of the Surgeons to the above criticism may now be quoted in full.

To the Hon'ble Richard Benyon Esqr.,

President and Governour *Etc.*, Council of Fort St.

George. Hon'ble Sir and Sirs.

Having perused the paragraph in the general letter of this year which your Honour and Council was pleased to favour us with concerning the medicines for the use of this settlement, we find that the honourable Court of Directors have thought proper to take of from the indent about a fourth part which they have been pleased to make a separate account of, and have given us the liberty of taking them for our own use at an advance of ten per cent on their prime cost.

As the number of venerial of patients in Company's Military servants in the Hospital (to whom large quantities of medicines are for that purpose exhibited) are always considerable, we beg leave when such medicines for the use of the Hon'ble Company that are under your care are expended, we may petition for a supply for these appropriated for the use of the Surgeons and as the Hon'ble Court are pleased to order that we should find our own medicines for our private practice, we will annually indent for our use sufficient quantity of such to be put by our own Apothycarys and sent us in the manner the Honourable Court have been pleased to direct, and we desired to be excused taking these sent out and designed for our use, because they are not very well fitted to answer that purpose, as consisting of several things we do not want, as well as

being difficient of such as we have sometimes an occasion for.

As to what the Honourable Court are pleased to intimate in their 64th paragraph relating to the Capital Instruments and utensils, we beg leave to observe that there is a more than ordinary consumption of these things from the Nature of this air, whose saltness subjects them very much to rust. But we will be as careful of them, and as sparing in all future indents as possible.

We are

Hon'ble Sir & Sirs,

Your most obedient humble servants,

Fort St. George, 16th Aug. 1742.

NATHL. BARLOW.

ANDREW MUNRO.

In consonance with the above orders, which were communicated to the respective Surgeons, separate indents were either sent or money paid to the Company for the drugs used in private practice. Ship Benjamin sailing on 9-10-1742 carried, as already stated, duplicate Indent for medicines for the Hospital in the Company's account for 1744. The same ship also carried duplicate Surgeons' particular indent for medicines for 1744, "to be put up by John Loyd, apothacyry in Aldergate Street."

A later despatch from England dated 21st March 1744 disposed off the matter finally:—"Have resolved to send out annual supply of medicines and not to supply the surgeons with any for their private practice. What are used to the country ships or to surgeons must be paid for, at 20% advance on invoice."

In 1746 when ships failed to call at Fort St. George there was a great shortage of medicines.

—Then there is a big gap, due to lack of records—

The next indent for Madras traceable in the records was carried by ship Elizabeth leaving Fort St. David on 12-2-1750 along with the papers from the Presidency *viz.*, Fort St. David. This ship carried the Surgeons' indents for 1751 and Surgeons' lists of deaths for 1749. Thenceforth the Fort St. George papers are seen to be forwarded to Fort St. David to be sent home along with the despatches, letters and books from the Presidency. Ships Severn and Norfolk sailing in February 1751 carried the Surgeons' indents for medicines and the lists of persons who died under the care of the surgeons at Fort St. George.

The Council of Fort St. George wrote to England in 1751: "desire large supplies of medicines as the number of sick in Hospital has increased." The same request was repeated in November 1752: "More medicines required." Again in December 1753: "Send a larger supply of medicines."

LISTS OF INSTRUMENTS IN STOCK

A letter dated 8th December 1749 from London:—"We direct that for the future you send at the same time with your annual indent for medicines and drugs, *a list of all the surgeons instrumets and utensils belonging to the Company then remaining.*"

CHAPTER X

Hospital Equipment and Dieting of Patients

CLOTHING, COTS AND BEDDING

The hospital equipment did not figure very often in the early records. Most of the articles wanted in the hospital might have been provided from various items of expenditure, there being no separate entry unless the demand was a large one or a special one. The extracts from the correspondence between Church Wardens and the Council of Fort St. George, clearly indicate that the provision of cots and clothes to the hospital, in the last decade of the 17th century, amounted to 40 Pags. a year. The following Consultation dated 6-7-1696 gives the same information and serves to illustrate the procedure adopted. "The Paymaster producing a list of *sick mens' clothes* and what wanting in the hosipital, he is ordered to provide *clothes and cotts* to the amount of forty pagodas whereof one-third to be paid by the Church Wardens as usually."

Full records are available from 1713, when the new building on the old site by the River was nearing completion. It seems to have been the usual procedure to supply new clothes and cots once every year. In assigning reasons for the excess expenditure under the heading "Charges, Garrison" in the month of August 1713, it is noted that furnishing the hospital with

quilts for beddings, quilted gowns, caps, breaches, pillow-bears and shirts for the sick, as *is usual once a year*, cost Pags. 92-22."

The following entries are reproduced in full to indicate the method and manner of requisitioning the necessary articles and the type of articles wanted and their number in the early part of the 18th century. "Thomas Robson, surgeon, delivers in a list of necessaries wanting in the hospital for the sick soldiers, the said list is entered after this consultation. Agreed that the Paymaster to forthwith provide the several things mentioned therein which are to be in the Doctor's custody, and he to account for them as expended."

"To the Hon'ble President,

The Hospital cloathing being all worn out, it is requested your Hon'ble & *etc.*, will be pleased to order a new supply as undermentioned.

Yours,
Thomas Robson.

List :—

Quilts	...	...	100
Shirts	...	...	100
Caps	...	...	100
Pillow cases	...	...	200
Gowns	...	...	100
Briches	...	...	100
Pillow cases	...	...	100
Cot lacings	...	...	20

Again, Dr. Thomas Robson requested the Council to supply the following articles necessary for the use of the hospital, after a few years.

"To the Hon'ble Joseph Collet Esqr.,
President & Governor of Fort St. George &
etc., Council.

The Hospital being in want of the undermentioned clothing, it is requested your Honr. & Ca. will be pleased to give your orders for them.

Your Honr. & Ça.
Most Obedt. humble Servt.
November 28th, 1717. Thos. Robson.

List:—

Quilts	...	...	100
Gowns	...	...	100
Shirts	...	...	100
Breeches	...	...	100
Caps	...	...	100
Pillows	...	...	100
Pillow covers	...	...	100

Sometimes, the indent was cut down either by the Surgeons or by the order of Council.

Extraordinary expenses 'under hospital charges' for the month of September 1725 was on account of the following:—

For the provision of 40 Quilts		Pags. 90-11-60
	40 Banian coats	
	40 Pairs of breeches	
	40 Shirts	
	40 Caps	
	40 Pillows	
	40 Pillows cases	
	40 Pieces of cot lacing	

On 14-4-1728 the Paymaster read "Mathew Lindsay, Surgeon, his list of necessary wanting in the hospital, which is ordered to be entered. That Paymaster deliver in one half of the necessaries wanted and what part of them he shall find to be necessary."

List:—

Shirts	...	...	100
Pillows	...	...	40
Pillow cases	...	...	80
Gowns	...	...	40
Pair of drawers	...	...	100
Quilts	...	...	70
Caps	...	...	100
Cots	...	...	20
Double rolls for cot lacing.		...	20
Stools	...	...	20

The actual cost of definite quantities of different items becomes evident from a perusal of a few lists. In giving the detailed items for the extraordinary expenses

of February 1735, the following statement of articles supplied is entered with their costs noted against the items.

		Pags.
Shirts.	100 ...	41–18–0
Caps (double 100, single 100). ...	200 ...	9–33–0
Drawers 50 Ginghams, ...	...	...
Quilted 50	100 ...	29–27–0
Quilts.	50 ...	43–18–0
Banyan coats quilted.	50 ...	35–27–0
Pillows.	50 ...	21–16–0
Do cases.	100 ...	11–22–0
Lacing for 35 cots.	...	27–10–0
2 Bathing tubs paid the cooper. ...	...	12– 0–0
A grid iron cook room. knife, spoons and a large iron ladle. ...	...	4– 3–0
		236–30–0

At a later stage, the surgeons *submitted an account of the balance of stock* on hand and a separate list of the articles with quantities required. The Consulation on 2nd June 1737 gives two lists submitted by the surgeons :—

(1) *List of cloths and other necessaries remaining in the Hospital.*

Quilts.	37
Gowns.	56

Pillows.	...	...	45
Pillow cases.	...	...	35
Shirts.	...	...	27
Drawers.	...	...	40
Caps.	...	...	29
Cotts.	...	...	33
Lacing for cotts.	...	...	26

(2) *List of what are now wanting in the Hospital*:—

Quilts.	...	...	30
Gowns.	...	...	20
Drawers.	...	...	30
Shirts.	...	...	70
Blue caps.	...	...	50
Pillow cases.	...	...	50
Lacing for cotts.	...	...	15
Cotts.	...	...	6
Pillows.	...	...	20

The next few extracts are offered to show the marked increase in the quantities required by the middle of the 18th century. A list of necessaries wanting in the hospital submitted on 29th March 1741 :—

Shirts	...	...	200
Drawers	...	...	200
Caps	...	...	200
Pillow cases	...	...	200
Quilts	...	...	100
Pillows	...	...	80
Gowns	...	...	100

Cot lacing	...	...	40 pair
Cotts	...	...	20

The accounts read on April 30, 1741, stated under "Charges Hospital", Pags. 390-19-44, and later, the explanation for the extraordinary expense of the month is noted as due to "cloths and sundry necessaries, supplied this month, amounting to Pags. 346-31-44."

On 20-12-1743, Barlow sent in a list of necessaries for the hospital for 1744.

Shirts	...	...	200
Drawers	...	...	200
Banyan coats	...	...	100
Caps	...	...	200
Quilts	...	...	100
Stools	...	...	8
Pillows	...	...	80
Pillow cases	...	...	200
Cot lacing	...	...	30 pieces.

In the review of accounts for 1743, it is stated that the additional expense of Pags. 451-6-15 was "occasioned by the supplies of clothing for the sick, not being brought to account last year, which together with that for this year increases this head."

On 15-11-1744, Barlow and Munro conjointly presented a list of necessaries wanting in the hospital for 1745:—

Shirts	...	...	250
Drawers	...	...	100

Gowns	...	...	150
Caps	...	...	100
Quilts	...	...	200
Pillows	...	...	100
Pillow cases	...	...	50
Cotts	...	...	12
Cott lacing	...	...	20 pieces.
Stools	...	...	7

In the account for April 1745, read in May, the expenditure is shown as Pags. 388-12-50, out of which Pags. 334-10-10 is said to have been incurred for clothes, *etc.*, for the sick as per account.

UTENSILS AND OTHER EQUIPMENT

The receipt for money given by the Parishners of St. Mary in 1688 when the hospital building was sold to the Company mentions the transfer of "all and every part of the hospital—the utensils thereunto belonging excepted." The re-organisation proposals in 1698 by Bulkley also refer to vessels and utensils necessary for the preparation of medicines.

Utensils must have been furnished from funds under general expenditure for the garrison, only one extract has been discovered, specifically alluding to utensils for hospital. Included in the extraordinary expenditure under "Charges—Garrison" for the month of January 1718, is an entry "Five Gunners entertained this month and making utensils for the Hospital —Pagodas 22 : 32."

DIETING OF THE PATIENTS

One of the reasons for organising the hospital in 1664 was "to see that nothing comes to the patients neither of meat nor drink but what the doctor alloweth." In 1688, records specially mention "diet to sick soldiers brought by ship Princess". Dr. Bulkley's memorandum also emphasises the necessity of a proper diet to the patients and recommends rate of 4 annas per day for each person as the charges for the diet. The Steward provided the patients with the necessary diet as recommended by the Doctor. In the early days of the hospital the monthly accounts presented to the Council contain a separate item 'Diets'. It is likely the hospital diets were included in the expenditure under this item or met from the collections from patients. It is only very rarely that one comes upon an entry like the following, (dated the 8th September 1694).

"The Paymaster is ordered to pay Pagodas 19 : 12 to the Steward of the Hospital being so much disbursed by him more than received for the maintenance of sick persons for the months of April, May, June and July, being occasioned by the providing of provisions as ordered by Doctors, which cost so much more than the allowance."

In the section on Hospital Accounts instances are quoted where soldiers of other establishment as those of Bengal were accommodated in the Hospital and the charges for dieting and medicines were debitted to the respective Factories.

From 1724, when a new head of account "Charges Hospital" was opened in the Company's registers, the expenses for dieting must have been included in the monthly statement submitted by the Paymaster.

THE STEWARD OF THE HOSPITAL

A Steward was in charge of the dieting of the hospital patients from the very early days of the institutien. In reply to the letter of the Church Wardens in 1697 the Council ordered that the Surgeon or the Steward of the hospital render a monthly account to the Paymaster of the charge of the said hospital. Dr. Bulkley's momorandum on the reorganization of the hospital at the end of the 17th century also pointed out the necessity for a Steward for providing and taking care of cots, bedding and apparel. Lockyer also refers to thc role of the Steward in his descriprion of the hospital. Other records also allude to the bills submitted by Steward for dieting 6 soldiers of Bengal.

There is only one name available in the early records. About 1726, there was as steward of the hospital one Henry Ross. He died intestate and the Council ordered that whatever effects could be found should be taken under the care of the Paymaster. Among the notes and bonds, there were two from Duncan Munro for 200 Pags. There is also one entry mentioning the pay of the Steward. A consultation dated August 1725 reads "The Steward of the Hospital, pay raised on his petition, from 3½ pagodas to 5 a month."

Chapter XI

Accounts and Audit of the Hospital Expenditure

From September 1724, there appears a *new heading* in the monthly statement of accounts by the Paymaster *i.e.*, "Hospital charges."

	Pags		
Hospital charges in Sep. read in Oct.	32	19	0
,, ,, in October read in Nov.	44	31	0
,, ,, in Nov. read in Dec.	93	19	0

(of this amount, the extraordinary charges amount to Pags. 50, on account of arrears paid to Doctor's mates).

The Council ordered Randall Fouke to look through Paymaster's accounts and report what might be done immediately towards retrenching the charges comformable to the company's prescriptions.

A number of detailed criticisms or comments were made on different items of which the following concerned the hospital accounts :—

1. One of the "Sergeants" of the three companies was *Steward of the Hospital.* So it was suggested that his pay be debited to Hospital and his monthly allowance fixed by the Board.

2. The heads of charges were subdivided according to the appropriations to a particular use.

3. The Directors complained of large salaries to supervisors of buildings and "others"......and the cost of "bazzar" physick and other articles. The "others" referred to, were Doctors' mates and Steward of the hospital. It was proposed to save 50 pags. per month from these items.

4. Variations in expenditure were explained "The Governor and Council, Secretaries, Ministers, Doctors, Servants, stood always much the same but in the year 1707 Mr. Frazier happened to be suspended so there was no second but one Doctor which might occasion some difference."

In the same year, another alteration was made on 4-9-1724. "The Doctor's mates having been in the Military Role as Sergeants and now dismissed; ordered that their pay be advanced 2 pagodas each."

Fort St. George charged other settlements for dieting and treating patients. In August 1728, there is an additional entry:—Bengal Presidency-and the explanation adds the following information :- "Paid the Steward of the Hospital by order of the Consultation, his bill for victualising the Bengal soldiers from the "Compton" while they remained sick ashore in the hospital here; pags. 18-18-0." Again, in August 1729, there is an entry under "Bengal Presidency." "Paid Steward of the hospital's bills for victualising 5 of Grantham's soldiers for 16 days while they were ashore here "pags. 5-15-0." In 1734, there is an entry under extraordinary expenses "Paid doctor's mate for hospital charges on a Bengal

soldier; 1-14-Z2". Another enntry of interprovincial interest: "Bengal Presidency:—Entertainment of sundry sick soldiers belonging to that place in the Hospital; 4-24-50". There are some other accounts connected with medicines sent or cooly hire on boxes of medicines despatched to Fort St. David or allowance to one "Mr. Hague, while he remained at Fort St. George, he being appointed surgeon of Bencoloon." When Surgeons travelled to Fort St. David, the travelling allowances were debited to the account of that settlement.

Even as early as 1726 there was trenchent criticism on hospital expenditure. Ways and means were devised for reducing the expenditure as the following comment indicates:—

"The president represents the Board that upon reading the particulars of the article of charges of Hospital he apprehends there are several of them too large and other unnecessary and ought to be reduced and discontinued: which being taken into consideration and the several particulars again read and enquired into, it was represented that the surgeon who has the immediate direction of the hospital always insists that the present charge is necessary for entertaining and recovering the sick and that no reduction can be made of it. Ordered that whereas it hath been for some time the custom for one of the surgeons to have the immediate care of the hospital solely, they do in future act each 6 months by turns that by their acting thus, interchangeably, we may make the experiment whether they cannot reduce the charge of his hospital lower than the other,

which it is believed out of emulation to recommend themselves, they may do—"

A despatch to England early in 1727 intimated this arrangement to the Company "As an expedient, proposed that the surgeons should interchangeably take the charge; by their emulation to get it reduced. Hope soon to see the success." Again, two years later, in reply to warnings from home, the council wrote "Surgeons not extravagant in the management of the Hospital: and that expense swells to no height."

A few illustrative statements of accounts are appended.

HEAD OF ACCOUNT:—

HOSPITAL CHARGES.-(Monthly Expenditure)

1725. Accounts for			Pags.
,, February	read in	March 1725	52–29—0
,, March	,,	April	54—8—0
,, April	,,	May	54—31–0
,, May	,,	June	52—6—0
,, June	,,	July	53–15—0
,, July	,,	August	64–30—0 This includes extra-ordinary charges of 10 pags. paid to Mr. Ramsay.
,, August	,,	September	63–23—0
,, September	,,	October	156–27–60 Extra-ordinary charges for quilts *etc.*, 90–11–60.
,, November	,,	December	63–35—0

1726. Accounts for

,, December 1725	read in January 1726	64–26—0
,, January 1726	February	48–32–40
,, February		51–31—0
,, March		42–35—0
,, April		38–20—0
,, May		42–30—0
,, June		42–24—0
,, July		41–28—0
,, August		43—9—0
,, September		42–18—0
,, October		41—0—0
,, November		45–13—0

1727. Accounts for

,, December 1726		45–22—0
,, January 1727		43–16—0
,, February		44—9—0
,, March		43—0—0
,, April		42–10—0
,, May		103–30–70 (of this Pags. 63-3-70 was due to quilts, coats, drawers, shirts, caps *etc.*
,, June	read in July	46–27—0
,, July		48–10—0
,, August		40–12—0
,, September		38–33—0
,, October		40–30—0

,, November 40—4—0

,, December 40–10—0

ANNUAL EXPENDITURE FROM 1725–45

Yearly expenditure under the head 'Charges Hospital' as per books for each year ending April for the two decades from 1725–1745.

YEAR	PAGS.	
1725	471—1-15.	
1726	769-35-30.	
1727	838-30-33	
1728	826-19—9	
1729	870—0-53.	(The increase in this year is occasioned by a greater number of sick in the Hopital.)
1730	784-21-12	
1731	896-26-27	
1732	840-17-18	
1733	1023-24-20	
1734	872-35-40	
1735	1097-19-25	
1736	1064—7-10	
1737	984—9-20	
1738	1138—6-46	
1739	1114-29—0	
1740	1284-25-58	This additional expenditure being due to extra medicines, costing Pags. 115-30-50 and clothes costing 54-2-8:

1741	1375–17–14	
1742	1225–31–74	
1743	1677—2—9	(Cause of extra expense already explained)
1744	1286–18—4	
1745	1603—0–72.	(Account for Jan. 1745 alone was 496–19–12). In the explanation of annual accounts, under the head charges Hospital, the increase of Pags. 316–18–68 over the expenditure of previous year, is accounted thus :—

By larger quantity of clothing wanted Pags.	133— 0— 0
Also allowances of firewood and attendance Pags.	46—18— 0
And Medicines delivered more than year Pags.	137— 0— 0
Total Extra ...	316—18—68

The expenditure of the Hospital was gradually increasing. The average of monthly expenditure at normal times ranged betweeen 60 and 80 pagodas. But the expenses rose to 300 or 400 pagodas during those months when clothes were supplied to the Hospital.

After the reoccupation of Madras by the English garrison and the reemployment of the full medical staff

in the Hospital at Madras about 1750, the charges under the head Hospital were noted as follows :—

Charges for December, 1749 - Read
in January, 1750 Pags. 607—35— 0

Charges for January, 1750 - Read
in February, 1750 Pags. 190— 2—48

Charges for February, 1750 - Read
in March, 1750 Pags. 100—24—70

Expenditure for December was probably high on account of repairs and reorganisation and fresh supplies for the hospital which was closed for over three years. The expenditure from 21st August 1749 to end of April 1750 amounts to Pagodas 1418-11-61.

CHAPTER XII

Types of Diseases and Ailments

The names and relative incidence of various common diseases of the age in the Hospital and in the settlement may now be briefly mentioned. One cannot, however, help regretting in this connection that it has not been possible to trace and reproduce the valuable documents which could have thrown considerable light on the prevalence of the most fatel diseases in the settlement. As early as 25th January 1717, the Council wrote from England "It would be very proper also that the Surgeon should sign and send yearly a List of the Deceased annexing to their names an exact account of their distempers so that, if necessary, we might consult the Physicians here for proper Remedys especially if at any time it should happen that the Surgeons should not be sufficiently well skill'd in the nature of such distempers but this use it would always have to show what the reigning distempers are and whether the same always continue to seize the Inhabitants." Later, in 1742 there were clear and urgent directions from the Company insisting on such statements. "The surgeons must transmit an attested list of the deaths adding the distember of each person agreeable to the practice in Bengal."

As a result of this order, the first "list of persons who died under the care of Surgeons at Fort St. George and their distempers" was carried to England by Ship Benjamin sailing in the early part of October 1742.

List of Fort St. George Packet to England, *Via* Prince of Wales (6-9-1744) :—List of persons who have died under the care of Surgeons at Fort, with their distempers since January 1st, 1744.

Again, Fort St. George Packet to England, *Via* Darrington (16-2-1745) also contained list of persons who died under care of Surgeons with their distempers for 1744.

List of Fort St. Goerge Packet to England, *via.* Beaufort (16-2-1745). List of persons who died under the care of the Surgeons with their distempers for 1744.

List of Fort St. George Packet to England, *Via* Benjamin (24-9-1745). List of persons who died, with distempers, from January 1st 1745.

List of Fort St. George Packet to England, *Via* Dolphin (6-10-1745). List of persons who died with their distempers from 1st January 1745.

Since these lists are not available, in Madras and and could not be obtained from India office or Record Office, London, local records were closely searched for references to sickness and illness among company's servants and neighbours at Fort St. George. The data gathered is arranged in 4 groups in order of importance. A few more allusions to the prevailing types of diseases may be found included in the lists of applications for leave and for voyages to England for health as well as in the medico-legal certificates.

Group I

Diseases from which some patients in the Hospital are known to have suffered.

(1) *16th January 1678*:—Servant Waterhouse lay in the Hospital "*Lame* of the shot he had received." (A gun shot wound)

(2) *21st July 1683*:—"John Fransis—new gunner—had a nasty accident—His right arm was blown off—He is in tears and losing much blood; it is feared he is in great danger of his life."

"On the night of the 5th August 1683, at nine O'clock, died John Francis, who formerly lost his arm by a great gun, having taken cold, which contracted his joints, sweld his throat, that he could receive no sustenance (cellutitis ? Tetanus ?)"

3. On 7th June 1725, the Council granted the request of Captain James Winter who represented that one of his soldiers, consigned for Bengal was so dangerously ill of the Scurvy that it is precarious to carry him further. The Captain also begged leave to *Admit the patient to the hospital immediately with a hope of recovery.*

4. On 16th August 1742 Doctors Barlow and Munro, submitted " As the number of *Venerial Patients* in Company's Military servants in the hospital to whom large quantities of medicines are for that purpose exhibited are always considerable, we beg leave when such medicines for the use of the Hon'ble Company that are under our care and expended, we may petition for a supply from there........."

5. Amitton requested to be on invalid list as he was, through age and informities, reduced to a weak condition and to lie sick in Company's hospital.

6. William Mansfield also requested to be put on invalid list. He was taken Prisoner by the French and was kept up prisoner. By his being in prison for long time and by his sleeping on the ground he got a violent cold which settled in his head. He was in the Company's Hospital for a long time and was still going worse. In March 1751 he lost his hearing and the sight was failing; hence his request.

7. Soldiers intended for Bengal or belonging to Bengal Ships were also very occasionally admitted for recovery from attacks of Scurvy as patients in the Hospital on their way to and from Bengal.

A consultation in 1752 mentions that "Half of our garrison are in Hospital which renders it impossible for us to support any outposts."

There are many other references to soldiers and other employees undergoing treatment in the hospital but the specific disease in each case is not mentioned by name. It therefore becomes necessary to obtain a general impression of the prevalence or absence and the relative frequence of some diseases by analysing and tabulating some of the allusions to diseases affecting the English setlers at Fort St. Gerge.

Group II.

Diseases affecting the company's servants including sailors arriving at Fort and the English residents of Madras.

The sailors and soldiers touching or landing at Fort St. George frequently suffered from *Scurvy.*

In 1709, Captain Gough buried 14 of his men of Scurvy before he arrived at Fort St. George; brought in 40 men laid in hammocks. Four died after landing.

In July 1736 James Montgomery, Captain of a ship, gave as reason for his coming into the Port of Madras the illness of his sailors "I have now at this time 4 foremastmen and 2 quarter-masters with this scurvy, not able to help themselves; besides 13 that can but just walk the deck and expect they will lay down every moment by other distempers which obliged me to put in to recover all their health".

William Jodson, Captain of Royal George, also represented in June 1738, that most of his sailors were in a miserable condition with Scurvy, that they recovered on touching at Batavia but relapsed again and he therefore put into Madras for fresh provisions."

The commonest and most virulent diseases in the vicinity of Fort St, George were Dysentery and Fever.

The following are instances of the ravages of *dysentery* :—

In 1674 Samuel Tutchin, Minister, "died after 4 months sickness of the Fluxie."

Langhorn was "very roughly handled by the said country diseases Fluxie which held him near 4 months."

John Bigging died of Fluxie (Dysentery) in 1684.

Gifford was "taken ill with a violent fit of stone and dysentery and windcollic in 1686."

In 1687, John, Assay Master, "was ill of a Fluxie, there being little hope of sudden recovery."

Thomas Wavell, died of "a bloody Fluxie after a tedious sickness." In September 1718, Charles Mitchell, entreated permission to go to England, "Having ...... greatly impaired his Health by the Heats of this climate, in so much that he is now reduced to a very low condition by a violent Fluxie and fever which he has laboured under for the space of 4 months and finding no probability of recovery by continuing here." Within a fortnight he died at Madras. Edward Brackstone petitioned the Council in September 1721:—"Having laboured under a severe *flux* for this twelve months past, or upwards and finding myself much worse in the monsoon than in the other part of the year, I am apprehensive of the fatal consequence that may attend the approaching one."

The epidemics following famines *etc.* seem to be some type of fever which was rapidly fatal. The following entries refer to *fevers*.

In 1689, Sir John Biggs, a judge of Mayor's court, died "by the malignity of a few days' fever."

John Cheney died of a fever in 1691.

In 1714 John Mason died suddenly of a malignant fever.

In 1720 commenting on the death of Thomas Robson, Surgeon of Fort St. George it is noted "The heats after the long drought carried off many by a nervous inflammatory fever."

Among the non-fatal and *chronic ailments*, *veneral diseases* would appear to head the list. The representation of surgeons about the large number of veneral

patients in the settlement has already been quoted. Here is a particular case.

John Crandon lived a lewd and scandalous life. When commanded to depart he begged to be excused from discharge from Company's service "untill he had gone through his cure of a troublesome disease which the agent then told him plainly of, which we shall forbear to mention here." After 6 months, the Agent knowing that Crandon was either cured or took the same disorderly liberty as before, told him to attend to his business properly.

Though *Beriberi* does not seem to have been rapidly fatal, it was recognised to be a tedious and serious illness, very difficult to cure.

Beriberi was known from 1660 in Madras, when William Hull "ended his days of a languishing sickness commonly called Berberies." In 1689, there was another report which shows how difficult it was to treat. "Thomas Constable, being much afflicted with the beriberi distemper which is very difficult to be cured here, having successlessly tried many experiments, desires leave to go a voyage to China where he hoped to find some remedy to the recovery of his health and limbs, in consideration whereof, it is thought fit to grant him his request." Another case of "Berberies" reported in 1724 is included under invalid pensions.

Allusions also occur in records to miscellaneous types of diseases, amongst which the following may be quoted as examples.

Mr. Rush, Surgeon of the *Cadogen* petitioned as follows :—" I am unhappily indisposed with the *Disorder in my liver, a distemper which I understand is frequent and sometimes fatal in this place.* I have been advised for the recovery of my health to enter into a *Mercurial Course* which will prevent my going on board our ship the Cadogen with safety. I therefore humbly desire your honour to consent to my staying ashore for the recovery of my health."

In 1691-92, Gray died of an " imposthume in the liver" at the early age of 23.

Robert Freeman, Fifth in Council, died of " a dropsy" after a long and painful sickness.

Jonathan Newman, as Ensign praying for pension in 1717 after 25 years of service, mentions that he was very infirm " as trembled with the *falling sickeness,* which makes him incapable of doing his duty."

On 20th July 1692, Captain James Bett, Commander of the soldiers " departed this life about 3 of ye clock in ye afternoon, occasioned as " is thought by ye *bite of a Mad Dog,* that had bitten him about 6 weeks past."

The President was afflicted for several months in 1740 with " sore eyes " which was given as an excuse for not signing consultations during that time.

UNSPECIFIED SICKNESS

In 1665, Fort St. George wrote to the Company in England describing sickly condition of the garrison, "In

our last, we advised of the small stock that we had gathered for the relief of our poor and sick soldiers here. You may be pleased to take notice in what want we are of Englishmen for soldiers by the mortality that had happened amongst those last sent out."

There is an illuminating comment on Madras previous to 1676. "This place, being all on loose sand, where between scorching reflex of the sun and the flying of the sand, we would be scarce able to draw our breath, which was formerly the cause of great distempers, sicklyness and mortality, rendering the place very uncomfortable and almost uninhabitable."

EPIDEMICS

In the year 1678, there was great mortality around Madras. The Council wrote "Famine conduces to sickness and generally leaves some reigning distemper behind." In Madras alone, thousands of people died and the English population also was affected. "Nor are we exempted from the too common fatality of sickness having buried within 3 months 43 English and many more doubtful ill of this malignant distemper, a fever and ague, some having supped merrily and well and dead before breakfast." In August 1687, on account of the great mortality at Masulipatam, a ship "Loyal" brought from there a number of Company's Employees and families, dangerously sick. While a second ship, "Adventure", was bringing the English from the North, there was great mortality in the ship and even the doctor of the ship died. Those alive were

weak and sick when they reached Madras. In the Autumn of 1719, there was a great mortality among the new military. Soldiers could not be spared to other parts. "Many always in the Hospital some dying; 70 or 80 now there." Again, 1723-24 was a sickly time. Most of the new recruits died, soon after arrival at Fort St. George.

Group III

Miscellaneous cases of accidents, claims for compensation, Invalid Pensions And Industrial Medicine.

In August 1667 Henry Gary isued against Foxcroft and Jearsey, a proclamation which, when read in the Chapel of Fort St. George had rather an expected effect on Captain Chuseman. "He dropt down from his seat in a *swoon and broke his head.*"

The great Winter had an accident in 1669. "On his way from Pulicat to Machilipatam, hunting a wild hog, got a fall and his horse falling and laying upon him sorely bruised him *etc.*, so that he was forced to give over his intended journey and return back to Pulicat, where he *remained for many days for his cure.*" Probably, the deposed Agent, might have preferred to stay in the Dutch Settlement, under the treatment of some Dutch Surgeon.

In the year 1676 Nathaniel Kebble, struck by Harris suffered from bleeding from the nose. His hand-kerchief was soaked with blood from his nose. Kebbel, in escaping out of prison leapt over Fort wall and his leg was sprained which disabled him.

In July 1750, Mr. Smith, one of the Council, fell from the terrace of sorting godown and broke both thighs. The Council thought that there was little probability of his life and appointed a successor. Later, there were noticed some signs of recovery. On 22nd October, Smith reported to Council that he was in a fair way of recovery and fully capable of taking charge.

TREPHINING

An interesting record *mentioning the operation* of trephining may be referred to here, though it does not belong to the municipal limits of Madras. In a report on the stray fight between the forces of Ginjee and the Company's soldiers at Fort St. David Mr. Raworth gives the following accounts of one of the two British Officers who suffered severe head injury during those free fights.

"That the other Leiut.. Wallace, having received a fall from his horse in visiting the out guards, by which his skull was broken and obliged to be trepaned, 'tis much to be feared he can never recover so far as to be able to do his duty."

INVALID PENSIONS

In August 1737, there was what seems to be the first application for *workmen's compensation.* Henry Fegge requested a certificate that the damage he sustained, (*viz* , the loss of the first joint of the thumb of his right hand,) due to a gun shot injury, depriving him of the proper use of his hand, occurred in the service of the Company.

Francis Akeman who came out as a soldier lost his hearing without any hope of recovery. As he was disqualified for any calling or any other business, he was struck off from the Military Role and was put on the list of pensioners from July 1738.

Ralph Tailor served Company 14 years and was "in camp when he got Barbiers, which has since hindered him the use of the limbs." So he was granted invalid pension.

John Casey with 10 years' service, lost the use of his right arm and was also pensioned as he was incapacitated.

INDUSTRIAL MEDICINE

Occasionally there is a reference to what is now called "Industrial Medicine". On 13th December 1711, the Council heard the complaint that the sickness among the soldiers was attributed to the fumes from the mint house.

"Several complaints having been made since the arrival of President Harrison by the surgeons and Millitary Officers that the mint house being over against and so near to the main guard and joining to the free guard house has contributed very much to the late sickness among soldiers by the hot land winds blowing the smoke made by melting the lead directly in among them night and day, which upon consideration we are really of opinion is but too true and further considering that the house is rapidly dropping down" the Council agreed to purchase the house of Mr. William Martin, for locating the Mint.

Again, on 31st January 1719, the Surveyor of Buildings and Assay Master " represent that it is absolutely necessary to built some further conveniences, particularly Chimneys to carry off the smoke which now almost stifles the workman ...."

Group IV

Diseases from which persons other than the English employees of the company were suffering in and around Madras.

Dr. Fryer who visited Madras in 1673 left a record of the curious belief in connection with elephantiasis "About this mount live a caste of people one of whose legs are as big as an elephant's which gives occasion for divulging it to be a judgement on them as generation of assassins and murderers of blessed apostle, one of whom I saw at Fort St. George."

In 1678, Kasi Veeranna's wife died in childbed on the second day ; the child also died on the same day.

Kasi Veeranna one of the Company's chief merchants died of malignant fever in 1680.

China Venkatadri, another merchant died of a tedious dropsical distemper.

Markrishna petitioned as follows in 1722 :—" Being under confinement at the Fort, and not having conveniences proper to take the necessary physique for recovery of his health ",—" Having been under confinement near 14 months, has occasioned him to be afflicted with *barbers and bloody flux* which distempers if proper medicines are not applied, in a short time may probably

prove mortal...he implores you, that he may be at his own house and use the best methods for the recovery of his health, it being impossible to take any physique where he now is."

It will be news—almost unbelievable to the present residents of Madras—to learn that only two hundred years ago, the vicinity of Fort St. George was so infested with snakes and other pernicious vermin as to become dangerous and offensive to inhabitants.

CHAPTER XIII

Sick Leave, Mental Cases, Medicolegal Accidents and Postmortems

SEA-VOYAGE FOR HEALTH

Petitions for leave to proceed to England or to go out on a voyage, for the recovery of health are numerous and indicate that sea-voyage was "a general remedy for chronic ill-health," often recommended by the Physicians of Madras in the 18th century.

1. Rich'd Spence petitioned the Council in December 1719 as follows:—"Broke by a long continued flux on him which he cannot ged rid of by any means whatsoever, as makes him liable to the assaults of this climate and every the least change of weather, he is therefore fully purposed to use that general remedy for recovery in such cases of Returning to England."

2. Francis Hastings sent in the following application to the Governor in 1721:—"Having very lately been dangerously ill that my physician almost despaired of my life and being now in such a weak state of body that unless I go for England very speedily I am apprehensive it will be very much endangered, I desire your Honour *etc.*, to permit me to take my passage on the 'Marlborough'".

3. Next year, (1722) Issac Pyke also petitioned in similar terms:—"Labouring under a great indisposition

in so much that his illness later confined him above 9 weeks to his chamber and now before he is recovered it return again much the same manner as before, wherefore for the recovery of his health and preservation of his life he *prays your Honour etc., to permit him to* return to England."

4. Michael Jeddere, requested the Council in 1728 :—"Your petitioner's wife having been sickly for several years, it is now thought absolutely necessary in order to recover her health, she should leave this place. He therefore begs your order for her going on board the ship 'London' to England."

5. In July 1734, Thomas Weston petitioned that he had been afflicted during the previous 12 months with a distemper which had deprived him of the use of all his limbs and rendered him incapable of doing his duty. He added "*that after the application* of all the usual remedies the distemper still increases so much upon me that the Physicians here consulted and agreed that a change of climate is absolutely necessary. I therefore apply to your honour for leave to return to England upon the first conveyance in order to recover my health."

6. William Douglas was attacked in 1736 with a distemper that "nothing but a change of climate relieve him." He took passage on Godolphin.

7. In June 1740, Eden Howard petitioned to leave India :—"Having during my stay in India felt the hot season every year troublesome to me and sometimes so

affected by it that I have not been able to do my office in the manner I could wish. And this year in particular, I have felt the bad effects of it in such a manner that gives me some apprehension I cannot stay in India consistent with my health and duty of my office."

The following two petitions are reproduced in original, to give an idea of the form and language of those applications :—

Petition of Edward Fowke.

To the Hon'ble Richard Benyon Esq.,

President and Governor & Council of fort St. George,

Honourable Sir and Sirs,

Having for these three or four years past suffered a great deal of pain from an ill state of helath, and finding no benefit from the use of medicines, but that my disorders encrease on me; it is at length the advice of the physicians that a change of climate is most likelyto restore me to my former health and, as I am now under a necessity of desiring to leave the Hon'ble Company Service

Fort St. George,

6th January, 1740-41.

Petition of..............

To the Hon. Richard Benyon Eq.,

President and Governor, Council of Fort St. George.

Sir,

Having a latter part of my residence here under a very ill state of health, and finding no benefit from the

use of medicines, but that my disorders increase on me and it being the Advice of the Physicans that a change of climate is most likely to restore me to my former health, I am under a necessity of desiring to leave the Hon. Company's Service in order to take my passage for England on the Walpole, Captain, Lowe, and to request your Hon. and *etc.*, kind recommendation of me to my Hon. Master that if I should recover my health so as to be able of serving them hereafter, I may hope to return again to my station.

20th January, 1742. I am,

Hon. Sir & *etc.*

Even residence in China and Bengal or at least a voyage to either of these countries, appears to have been recommended for the recovery of health. William Martin petitioned the Council in June 1737 that he was labouring under a severe illness for several years, that he was apprehensive of the approaching land wind season being fatal to him and requesting permission to go on the "Royal Gardian" to China. He also added that the physicians of Madras gave no hope of recovery from the ill state of health. In September 1737 Augustus Brunton, "indisposed for some time and the doctors advising for a change of air," petitioned to go on the first ship to Bengal.

There are a few cases where disease and ill-health were offered as excuse to stay on ashore without going out on a voyage as in the following instances:—

Richard Warner, made a reguest to the President and Council in 1687. "Since it hath pleased God to visit me with a long and tedious sickness which has rendered me altogether incapable of serving the Company or performing my charge aboard, this is humbly to request the Council that I may remain here on shore for the recovery of my health of which at present I have little or no hopes."

To the President and Governor *etc.*, Council of Fort St. George,

Hon'ble Sir,

Hearing your Honour *etc.*, design to send ship Good-fellow to Vizagapatam, I find myself obliged to request that I may be permitted to stay on shore being extremely out of order, with a fluxi that has now lasted upon me near 5 months and reduced me to so weak a condition that I am not able to undergo the fatigue of a voyage.

Your most obedient servant,

A MEDICAL CERTIFICATE (1754)

Mr. Dawsonne Drake, having been ordered to Bencoolen as Supervisor, declared himself physically unfit. He was told that if his health was unequal to climate of Sumatra, he must try that of Europe, He then submitted the following medical certificate, which reflects the medical Jargon of the age :—

CERTIFICATE FROM THE SURGEONS

'Mr. Dawsonne Drake, we have received your letter of the 15th instant, requesting our opinion of the

State of Your Health, and whether we think it adviseable your undertaking a Voyage to Bencoolen in order to supervise the Hon'ble Company's Affairs there. In answer to which, without entering into physical Disscussions which often raise Mirth rather than serious Attention. We must declare it as our firm Opinion that your present languid and Sickly Condition will not allow of any application or attention to Business in any Climate, and much less in a wet variable one such as Bencoolen. Should it be ask'd what this languid Sickly State of Health proceeds from, we say it is from originally weak Nerves, a Relax's alimentary Tube, Obstructed Bowells, want of due digestion, Persipiration, *etc.* These are our Sentiments of your Case, both with a due regard to the Interest of the Hon'ble Company and with the View we have of doing you Common Justice. *A. Munro, Rebert Turing.*'

MENTAL CASES

The following extracts deal with a mental case kept under observation of the physicians at Madras who finally submitted their reports and certificates:—Consultation dated 7th April 1720:—

"The President produces a letter which he received yesterday from Mr. Thomas Jenkinson, who has been some time in a state of lunacy: the said letter being read, is entered alter this Consultation, and being considered particulary that passage wherein he asserts his perfect recovery, and capacity to manage his own affairs, the Board recollecting that it might have been

wrote in a lucid interval, as had been his case before, immediately sent for Messrs. Robson and Pitchier the H. Comp's two surgeons, who attending the Ward were in the Sev'll. needful Respects question'd concerning him, and after having assign'd several physical Reasons for his being not yet Reinstated in a sound body and mind, they gave their final solution to the purpose, that he could not be yet perfectly recovered, because obnoxious to relapse, as he had done more than once before, notwithstanding he was to all appearance 'compost mentis.' It is therefore agreed to take no further notice of this affair till the Surgeons report his perfect Recovery with this exception howeve'r that the present Trustees may discourse him about his making choice of others in their room, they being willing to resign them, trust to make him easy, w'ch. when they have done they may report his answer." At a later consultation, dated 20th July, the Council ordered that "all the Surgeons in the place do give their opinions in writing relating to Mr. Jenkinson's distractions that if we find there is no probability of his recovery we may send him to Europe by first conveyance."

Finally on 8th August 1720, the Council considered the case and ordered as follows:—"The Surgeons deliver in their report of Mr. Jenkinson's distractions (as enter'd after this Consultation) setting forth that his going into a Cold Country may probably contribute to restore him, wherefore it's ordered that he be sent upon the Hanover and that his trustees provide every thing necessary for the voyage."

Here are the certificates by the doctors :—

The first one is by Dr. Pitchier, who was treating the patient.

Hon'ble Sr. &c'a,

On the 10th of January last Mr. Tho's Robson late Dec'd. and I were sent for to visit him. We found him afflicted w'th, a Mania or Malancholly madness having a deprivat'n. of Imaginat'n. and Judgement, Accompany'd w'th. great rage and Anger but without Fever.

We administer'd to him from time to time what is practicable in those cases, as Emeticks Cephalicks & Ca hav'g had several Intermitions and Chiefly towards the New Moon at w'ch time he acts and speaks w'th. a great deal of Vivacity as is accustomary w'th those people in that deplorable condition.

He never could be perswaded to take Phys'k' voluntarily but always oblig'd to have the assistance of two other men. Being of Opinion that the Change of Climate may contribute much towards his recovery because these Southerly Monsoons affect the Nerves and animal Spirits in great degree I wish he may be able to Justify the same.

July the 30th 1720. Andrew Peitcheir.

Then follows the joint certificate by other Doctors of the place.

" Hon'ble Sir. &c'a.

Having visited Mr. Thomas Jenkenson for some days and being Inform'd by the Surgeon that now

attends him of the method after w'ch. he was treated since the beginning of his illness we believe that going to a Cold Country (w'ch himself earnestly desires) may contribute much to restore him.

Hon'ble Sr. & Ca.
Your most humble servants,
DUN. MUNRO,
HUGH HOPKINS,
JAMES CHATELIER.

That closes the Jenkinson episode.

In the course of a report in 1726, on the "Town Prison" under the northern ramparts of White Town, there is a glimpse of the treatment accorded to Lunatics. "Pursuant to your Honour's, *etc.*, orders of the 30th past, I have been with Marshall and Head workmen to view the Arched prisons under the North Rampart, which are Six, and I found the Doors, windows and pavements in so Slight a Condition that it is no great difficult for a man to make his way out. *Two of them, wherein are two lunaticks, the pavements are all dug up and holes made in the walls, notwithstanding they are iron fettered, hands and feet :* and another wherein has been a person, several years for murder, told me, if he had a mind to break through, he could easily do it."

A consultation of 1744 records "There being among Military here two lunatic persons, who came out this year under these circumstances, namely James Pitchier and Thomas Jackson, and of whose recovery we hvae no

hopes, we believe Your Honour will not disapprove of our sending them on ship to England."

. The following entry, relating to a mental case advised to go Home, occurs in despatches to England from Fort St. David in the year 1749:—"On this ship takes passage Mr. William Holt who having the misfortune to be disordered in his senses which occasioned his commiting some extravagant actions we found ourselves under a necessity of suspending him from his seat at the Board, likewise holding any employment in your honour's service, of which a more particular account is mentioned in our Consultations of the 17th June the day of his suspension and as it is the opinion of the Doctors that his disorder has been occasioned by the heat of the climate, and from which there is no probability of his being relieved, should be remain here but that a cold country might be very conductive to the effecting a cure is the reason we have resolved to send him Home."

MEDICOLEGAL ACCIDENTS AND CERTIFICATES

In 1679, John Waters, Corporal, threw down Francis Hopkins when he attempted to carry arrack to prisoners. Hopkins broke his leg. The Council decided that Hopkins and not the Company should pay for the cure.

The Surgeons were called to examine and submit a medical report on John Nicks. Here is the certificate by Dr. Bulkley on the strength of which, Nicks was released from prison. "Find him very much indisposed by chilly numbness in his feet and hands and an oppression in his

breast and stomack, which is a hindrance both to his speech and breathing. These symtoms, in all probability, are occasioned by melancholy want of exercise, and his being obliged to breathe a stagnating air which, except speedily remedied, may prove of dangerous consequences."

On one occasion in 1695, when Lt. Seaton in a drunken brawl at mid-night, drew his sword and wounded through the arm, a Protuguese soldier who was on guard at the choultry, Dr. Bulkley was ordered to view the wound. The wound certificate given stated that "the wound was not dangerous." Lt. Seaton was sent for but answer was brought that he was sick of a fever.

On 16th September 1713, Fleet Aynsworth attacked with a sword Thomas Wilford, a writer. The sword "entered his body just under the left pap about three inches." "Dr. Robson being sent for and examined declares he has hopes the said Wilford may do well but that he is not yet out of danger."

CASES OF MEDICO-LEGAL INTEREST IN THE NATIVE POPULATION

During the famine in 1694–95 many families around Madras destroyed themselves by fire and water, "Latchiamma being found guilty of murder by the Jury on 13th instant by her own confession and sentenced to dye. She threw herself and child into a well to drown both but there being not enough water to drown her, she was saved." The motive was to escape a lingering death by famine, having neither food nor friends.

Another case of suicide is thus described:—"Mr. Tredcroft, Chief Justice of the Choultry, reports that one China Tombe had cut his own throat, and upon the examination of all the neighbourhood and his Doctor, that they do belive he did do it, he confessing it to them severally, and giving this reason, that he was in great pain, and lived six hours after. Both Mr. Tredcroft and the Choultrey Dubash declare that they find no reason to suspect that any other person had a hand in it but himself."

Ill-health was made a cause for postponing the final execution of a decree in 1725:—"Goda Ancona by reason of his long sickness, was absent from this place and several persons made demands in Court against him. The court gave judgement as if they were true and his houses and gardens were sold." Thereupon, he submitted the following appeal:—"Therefore I reqest that the money may remain to Court till I can recover my health and come to wait upon your Honour." He added that he was also sick and lame and could not stand in the Court to give answers.

A case of poisoning came up for trial before Emerson, Chief Justice of the Choultry in 1726. A woman slave attempted to poison a whole family. The poison had actually been given. "But operating very violently, quickly discovered itself and the effect was prevented by immediately administering proper emetics." In February 1728 the Company commended the Council. "Your care to prevent poisoning when a women slave was discovered to have attempted the destroying

whole family thereby, was commendable in resolving to give delinquent exemplary public punishment and publishing notice to forbid all persons, selling any sort of poison on penalty of Corporal punishment and confiscation of half the estate, unless the Justices give previous leave for sale thereof." This may be the earliest record of an attempt to introduce licenses for selling poisonous drugs, in this Presidency.

THE FIRST CASE OF MEDICO-LEGAL POST MORTEM IN SOUTH INDIA

In August 1693, Mr. Wheeler, Member of the Council and the *Justice of the Choultry died suddenly*. The first intimation is described in the following words:-

"Word being brought us while at Consultation on ye: 28th: Inst: that M. Wheeler was very sick, and soon after about 11 o'clock that he was dead, we went forthwith to his house and appointed Mr. Mildmay & Mr. Vanden Anker to take accot; of ye: Companyes Books and papers, which: were in M.. Wheelers hand, but in ye way thither ye following note was delivered into ye hand of ye President. Vizt."

[It was a note which Dr. Browne himself wrote to the Council confesssing his guilt and asking for punishment.]

"Hon'ble Sir,

I have Murthered Mr. Wheeler, by giving him Arsnick. Please to execute Justice on me the malifactor as I deserve.

Your Honis. unfortunate obedient servant,

Samll. Browne."

The next stage of prosecution was arranged in the following manner.

"Whereupon Doctor Browne after examination and his particular relation of the circumstances of a fatall mistake was by warrant of ye Judge Advocate committed as also his servant who negligently powdered Pearl in a stone Mortar wherein arsnick had been before beaten the mixture whereof with the Pearle is supposed to be the occasion of his Death; and there being symptoms of Poyson, Doctor Buckley (Sic) ye: Chyrurgeon of the Hospital was ordered to open the Corps and make his report.

"The Attorney General is ordered to prosecute Samuell Browne, and his servants concerned for the Death of Mr. James Wheeler, so soon as it can be done.

Members of the Council."

Then follows the report of the Post mortem:

"May it Please your Honr. with the Worspll. Council.

"According to your orders I did on Munday ye 28th instant in ye afternoon open ye dead Body of Mr. James Wheeler about five hours after his death, and upon viewing ye: Viscera or Bowells, found them not much altered from their natural temper and Colour the parts that seemed to suffer most were ye stomack and gutts wch: were a little inflamed and allmost wholy bared and strip't of the mucous or slimy covering wth: which those parts are commonly invested; ye Lungs allsoe were a little inflamed ye: blood that I gathered

out of severall vessells all appeared blacker then usuall, But ye suddainness of his death, and the severe symptoms he laboured under before he dyed, were greater arguments of Poyson received then anything I vould trace out by Dissection, this from.

Srs
Yor Honrs &cas most humble &
obedient servt.
EDWD BULKLEY"
Fort St. George
ye 30th August 1693.

Inquest over a case of drowning:—When Thomas Beavis, Centinel, was found dead in a tank in Nicholas Manuchi's garden on 2nd December 1716, the President ordered the Paymaster and Surgeon, Thomas Robson to view the corpse and make an enquiry how the unfortunate man was drowned.

CHAPTER XIV

The Wanderings of The Hospital

THE FIRST HOSPITAL IN PEDDANAIKPETA

The hospital continued to be in the same building in the Fort by the riverside in the first half of 18th century but in the few months following rendition of Madras the hospital seems to have been more crowded. In July 1750 Dr. Munro, re-employed as Surgeon of the Fort, represented want of accommodation in the hospital. Munro's own quarters at the south end of the hospital were occupied by the Fort Adjutant while rooms of the north end formerly allotted to Dr. Barlow had been immured and straightened by the French. At the same time, the increasing strength of the garrison demanded more elbow room. These considerations prompted the Council to convert the hospital into barracks and transfer the hospital to Peddanaikpet. In the middle of June 1752 the Council discussed this transfer, as already seen in the section on the Fort Hospital.

Several houses inspected by the Major and Surgeons were approved and a list was submitted to the Council, who thereupon ordered that the said houses be fitted up as a Hospital.

Fort St. George, June 1752.--List of houses taken up on account of the Hon'ble Company, for the use of an hospital:—

		Monthly Rent Pagodas.
1	House and Garden belonging to Francisco Peixto ...	5
1	do large do do do ...	4
1	do belong to Toanna De'Cruze ...	3
1	do do to Gracia ...	4
1	do do to the Padry ...	1½
1	do do to Manoel De'Monte ...	1½
1	do and Garden belonging to Anna Corea ...	2
1	do belonging to Pedro Corea ...	5
1	do do to Anna Corea ...	2
1	do and Garden belonging to Nathalia Gulvan ...	2
1	do do do to Marcus Vierra ...	1½
1	do do do to Adrian Benjn. Bahme ...	1½

Col. Love gives the following details with regard to the location of these houses. "The houses acquired, some of which possessed gardens, were twelve in number. They were mostly the property of Portuguese, and were situated near the middle of the Esplanade, opposite the existing Ordnance lines. They formed a block 100 yards in length, facing south-east. The ground stood several feet higher than at the present day." The transfer was effected in 1753—"The houses hir'ed in the Pettah and intended for an hospital being now refitted, ordered that they be appropriated for that use, and the present

hospital on the parade converted into barracks; and that proper necessarys, such as cotts, matts, *etc.*, be provided for recruits expected shortly to arrive."

NATURE OF UTENSILS AND INSTRUMENTS USED IN THE HOSPITAL

Though an actual copy of the indent for the Madras Hospital is not available in the records, printed till now, the lists sent up from Vizagapatam to Madras in 1752, 1753, give some idea of the common articles in Hospital.

Utensils wanting for the use of the Hospital at Vizagapatam (1752)

1 Bed Pan

2 Urinals

2 Hand Sieves

2 Top and Bottom Lawn Sieves

1 Glyster Syringe and Pipe Bolus Knives

1 Box, Scales and Weights from 1 Grain to 1 lb.

6 Lancets

6 Small Incision Knives some pewter Measures

1 Large Marble Mortar

1st April
1752 James Wilson

Utensils and Instruments (*Sic.*)

For the use of the Hospital at Vizagapatam (1753)

1 Bed Pan

1 Urinal

1 Hand Sieve

1 Top and Bottom Do

2 Pewter Funnels

1 Do. Glyster Syringe and pipes

1 Small Ivory Syringe

1 Pair Crook'd Seizars

1 Do. Streight Do.

½ Dozen Lancets

4 Small Incision Knives

Some Pewter measures of Sizes

Some cupping Glasses.

Nov. 1753 James Wilson

MEDICAL REPORT ON BLACK SLAVES WITH SMALLPOX

There is an interesting sidelight on Smallpox among the Coffrees (employees of the Company) who were due to sail to West Coast in October 1753. The Surgeons visited them and submitted a report—which made the Council postpone the date.

"Letter from Doctor's Andrew Munro and Robert Turing to the President read as entered here-after representing that most of the Coffrees are sick of the small Pox, Fevers and ca: and not in a condition to be sent to the West Coast."

Agreed That the sending them be postponed to another Opportunity."

MEDICAL REPORT

Honble Sir,

Having visited the Coffreys according to Orders We think that most or all of them are sick and greatly out of Order with small Pox, Fevers, with Cutaneous Eruptions, Coughs, Colds, shortness of Breath proceeding from an obstructed Perspiration and indeed scarcely any of them fitt to be sent on board ship, We are.

Honble Sir,
Your Honou's most humble and obedient Servants,
ANDREW MUNRO
ROBT. TURING

Fort St. George,
October 27th 1753

REPAIRS AND IMPROVEMENTS TO THE SALIVATING WARD

"The *Salivating Ward*" was probably a new feature of the Pettah Hospital. It might have been one of the latest innovations introduced into Madras in the middle of the XVIII century. In a consultation dated 10-12-1753, there is an allusion to the Salivating Ward.

" Mr. Henry Powney reports that he had visited the Hospital and represents that the salivating ward is very improper for the Purpose being only a *common tiling* which being open in many Places must be extremely prejuddicial to the Patients by exposing them to the Weather. *Ordered* that the tiling be plaistered and the ward made commodious for the Patients."

No. action was taken for some months and in a later Consulation dated the 13th May 1754, the same defect was again reported.

" Mr. Charles Bourchier reports that he had visited the Hospital and found no cause of Complaint in the patients as to their Treatment, but he represents that the Salivating Ward (which was reported in Consultation the 10th December last to be very improper for that purpose for want of better tiling) is still in the same condition. *Ordered* that the said Ward be covered with flat Tales so as to make it proper for the purpose to which it is allotted, and that Mr. Brohier be again acquainted therewith."

COMPLAINTS REGARDING DIET

In May, 1754, the patients complained of the bad quality of meat supplied to the Hospital and even produced a sample of it. The Council reprimanded the Surgeons, and ordered that proper inspection be made of the provisions of every kind.

"Mr. Charles Boddam reports that he (HAS) visited the Hospital and that a *complaint was made to him by the patients of the badness of the Meat* and a piece of it being produced to him it really appeared very indifferent. *Agreed* that the Surgeons be reprimanded and ordered to see that the provisions of every kind be good and proper for the patients and the better to detect anything of this kind it is *Agreed* that instead of visiting the Hospital constantly on Mondays as heretofore, it be visited at uncertain days, in the Week."

MENIAL STAFF OF THE HOSPITAL

The first record about the menial staff of the Hospital occurs in a Consultation dated the 8th July 1754. In the course of routine visits of inspection, the irregular attendance of the servants was noticed.

"Mr. Alexander Wynch reports that he had visited the Hospital and found no other cause of complaint than that the *Cooleys employed there do not give the proper attendance* and recommends it to the consideration of the Board whether some of the company's Coffreys might not be more under command and answer the end better. *Ordered* that four Coffrey slaves do constantly attend the Hospital."

Another report on the Hospital, recorded in a Consultation dated the 24th October 1754, also refers to the inadequacy of the menial attendants.

"Mr. Henry Powney reports that he had visited the Hospital and *finding the Number of Servants not sufficient to attend* the Sick who are much encreas'd he ordered a proper number of Cooleys to be taken in which the board approve."

SUGGESTIONS TO REMEDY THE DEFECTS OF THE BUILDINGS

A cluster of private houses in Pettah were selected and fitted up for use as a Hospital. The rainy season—the Monsoon and gales in Madras—in November 1754, forcibly revealed the defects of the attempts to convert a number of separate houses of varying sizes and shapes into a large building—to serve as a Hospital. The defects of the building and their evil consequences are recorded in a Consultation dated 25-11-1754.

"Messrs. Robert Orme and Alexander Wynch report that they had visited the Hospital and found that, by the defects of the Buildings, the Sick are greatly exposed and had suffered much from the late Inclemency of the Weather, that they complain of Cold which can only be prevented by adding to the Allowance of Bedding. That two Sweepers were found absolutely necessary to keep the place swept and clean. That the Steward complain'd he could not restrain the Sick from taking their Victuals out of the Kitchen without waiting till it was regularly delivered to them. That the necessary directions had

been given to remove all these Inconveniencys, except the want of Bedding and the defects of the Buildings, to which they are of opinion some advantageous Additions may be made at a moderate Expence."

"They also report that another Surgeon's Mate is wanted at the Hospital and that the Surgeons recommend Mr. Richard Thornton as a proper person. *Ordered* that Mr. John Brohier survey the Hospital and lay before the Board an Estimate of what Additions are proper to be made to it to prevent the bad Effects represented above. *Agreed* that the said Mr. Richard Thornton be received and employ'd as a Surgeon's Mate in the Hospital and that proper Bedding be provided for the Patients."

The proposals regarding the nature and extent of additions to be made, are contained in the Consultations in December 1754.

"Letter from Mr. John Brohier read being a Report of what Additions he judges necessary to be made to the Hospital amounting to Eleven Pagodas but the Gentlemen who at last Consultation reported that some Additions were necessary, observe that the Alterations Mr. Brohier proposes will not answer the Intention, but that a Penthouse the whole length of the Building on both sides is necessary to prevent the Rain beating in at the windows.

Ordered that it be done accordingly."

PROPOSAL TO PURCHASE THE RENTED HOUSES

Within two years after the starting of the Pettah Hospital, it was felt that purchase of the houses might be more advantageous than hiring (renting). A Consultation dated the 3rd February 1755, refers to this idea.

"A list of the Houses hired in the Pettah for an Hospital being laid before the Board the Rent whereof amounts to forty six pagodas, six fanams a Month, The Board are of opinion that as Repairs are frequently necessary as well as some Additions to make the Apartments Commodious, it will be more for the Company's Advantage to purchase than rent those Houses, and there being a Clause in all Grants and Leases of Ground that if the same should at any time be wanted for the Company's use, they may be at Liberty to take such Ground Laying for the buildings théreon at an equitable valuation.

Order'd that the Engineer with proper Assistants do survey the said Houses and lay before the Board an Estimate of their real present value."

The Engineer's report was duly submitted in November 1755 and the Council referred the matter to Works' Committee.

"Pursuant to an order of Council the 3rd February 1755, for estimating the value of the Houses hired in the Pettah for an Hospitul in order that they might be purchased for the Company's use as being less expensive than renting them. A letter from the Engineer is now

laid before the Board relating thereto, to which Letter is annexed a List of the Houses Rented being fourteen in Number at the Rate of Fifty Pagodas Six Fanams month together, And Estimates of the Cost of Five of them amounting together to Pags two thousand four hundred and thirty eight, Five Fanams and fourty two cash (2438-5-42) the rest which were built of Rubbish and Clay having been pulled down and other Buildings erected on the Ground they stood on, represents that no Estimate can be made of the value of the Materials, and it appearing by a Memorandum at the Fort of the said Estimates that the Materials of the above mentioned Five Houses, though old, are valued at the rate they are purchased by the Inhabitants, which cannot be the true present value of the Buildings."

"Agreed that it be referred to the Committees for conducting the works, to enquire what was the real value of the several Houses (as well as those standing as those that have been pulled down,) at the time they were rented, as the present value of some may be greatly encreased by the repairs that have been made at the Company's Expence and report to the Board, their opinion thereon."

DR. ANDREW MUNRO, COMPANY'S PHYSICIAN

A few words may be added here about an esteemed and popular Medical Officer of the middle of the 18th century—Dr. Andrew Munro, the first of the Company's Medical Employees, to be designated Company's physi-

cian. His long and distinguished career as surgeon of Fort St. George has been traced already. He applied to the Council, in 1756 to lay down the office of the surgeon on account of his great age and infirmities. The Council recorded their appreciation of Munro's meritorious services in the following consultation dated 28th December 1756:

"The President informs the Board that Mr. Andrew Munro had been to acquaint him that his age and great infirmities had render'd him quite unable to go thro' the fatigue of the surgeon's employ; that being desirous of giving all the assistance in his power, he often went abroad when he was more indisposed than many of his patients; and that he found himself so little able to do the duty necessary at the hospital that he was obliged, for the good of the people, to make known his infirmities."

"The President adds that, upon Mr. Munro's leaving him, he had thought of writing for Mr. Wilson, who is the next surgeon, and now at Trichinopoly, to come hither to supply his place; to give Mr. Munro liberty to retire from all business, and to continue to him his salary. But considering afterwards the great merit of this gentleman, the many obligations the inhabitants owe to him, and the great opinion most of the gentlemen in the settlement have of his abilities, he thought something more should be done for him as a reward for his past services, and that the town should not be deprived of the advice of so able a man. He proposes and requests of the Board that they will call up one of the

other surgeons to assist Mr. Turing in the hospital, and that *Mr. Munro may be appointed the Company's physician at this settlement*...........And that the Company may be address'd on this subject, requesting their confirmation hereof, and a suitable addition to his salary. All which the Board unanimously agree to.........'

SUGGESTIONS FOR REMODELLING HOSPITAL

By the end of December 1757, the accommodation again became inadequate and doctors Robert Turing and James Wilson requested further extensions to the hospital. Their letter throws considerable light on the average number of patients and contemporary notions of an ideal hospital and its equipment; "In the first place, we are humbly of opinion that the hospital should be made capable of lodging two hundred or two hundred and fifty men, and that there should be salivating rooms fitted up for thirty at least, not more than five or ten in a room. Likewise, that a place be fitted up for the reception of two or three hundred seamen against the arrival of the fleet."

"Secondly, that the floors of the several wards should be raised a foot at least above the level of the courtyard....

"Fourthly, that there be a room fitted up for operations, with tables and chairs for that purpose, and a chest to keep instruments and bandages in ready prepared.

"Fifthly, that there be a room fitted up for a shop, with shelves and a shop board."

HOSPITAL DEMOLISHED

About this time, the millitary officers and engineers had forseen the possibility of attacks on Madras from landward and were attempting to improve the north western defences of the Fort for the next emergency. Mr. Brochier, the engineer and the select committee appointed to consider the plans for the defence of the town recommended the demolition of the buildings occupied by the hospital and other houses surrounding it. "All the buildings which compose the present hospital being on high ground and their situation of great disadvantage to the fortifications of the place by overlooking them, and that batteries erected on that spot by an enemy would enfilade the greatest part of our North front, and greatly perplex the besieged, This being the case, it is absolutely necessary those houses should come down immediately, the best bricks of which may serve to line our earthern works; and the rubbish and ground on which they stand to fill the river, and finish the glacis to the Westward."

THE NEW HOSPITAL IN PETTAH

Col. Love continues the story: "The hospital and surrounding buildings were demolished towards the end of 1757 and some of the elevated ground was cut away. The records of the siege show that the hospital was transferred to some houses lying *further south-west, and near the site of the present General Hospital.*"

There are frequent references to the Old Hospital and the New Hospital. The Old Hospital was near Sampath Rao's house, in Peddanaikpeta, probably near the north-west end of the present Ordnance lines. At the back of Old Hospital, there was a street fronting the north side of the New Hospital. Near the New Hospital, there was "*an upper room house.*" There was already a Hill known as *Hospital Hill* and a bridge over the river Cooum known as *Hospital Bridge*.

BACK INTO THE FORT DURING THE SIEGE

In May 1758, Col. Call, the Engineer, was asked to submit suggestions allotting buildings in the Fort for various purposes, during the threatened siege of Madras. The Engineer made the following dispositions of bulidings which appeared most commodious:

Names or situation of buildings	How they can be made most secure	Purposes each will serve for
Solomon Franco's House.	By laying earth and straw thereon.	For an Hospital.
The Square, formerly the Convent.	By stationing the terraces, and laying on fasciness and earth	For an Hospital, jointly with Franco's House. This with Franco's House, will hold about 200 men, and I think much more proper than the Church for an Hospital.

The hospital was located during the emergency in the Fort (in Franco's House and the adjoining building.)

It will be very interesting if one could trace the registers and case sheets of the period, giving an idea of the war wounds in Madras and war surgery as practised by Dr. Turing.

WORKING OF THE HOSPITAL

The increasing number of patients in the Hospital and the frequent visits by inspecting officers, compelled the Company to re-organise the Hospital, and frame new regulations for more efficient working of the Hospital. These attempts are briefly alluded to, in the account of the Medical Department of Madras, given by Col. Crawford.

In the Cons. of 8th Nov. 1758, 'the Surgeons were directed to put forward, in writing, a plan for the better regulation of the Hospital. The regulations admitted by the Surgeons are contained in the Cons. of 28th Nov. 1758. They are long, filling eight folio pages. Paras 18, 19 and 45 state:—

18. That one of the Principal Surgeons attend hospital every morning to examine and treat the sick, and perform or see performed all capital operations.

19. That the Asst. Surgeons attend every morning, with the Surgeons, to dress wounds *etc.*, and that each Asst. Surgeon attend, and dress throughout the case, whichever patients he attends first.

45. That one of the Surgeons be appointed Store-keeper and Surgeon General.

In the Cons. of 1st Dec., 1758, the regulations proposed by the Surgeons were approved as a whole, with a few exceptions.

HOSPITAL BUILDINGS DURING WAR

The New Hospital (near garden house) was occupied as a picket for soldiers in readiness to repel the enemy's attack. After 12th December, during the siege, both the New hospital and the Old Hospital formed convenient places for the military for opening fire on the enemy.

In January 1759, while the place was prepared for the seige, the hospital was also made safer by making structural alterations.

(1) Coolies and workmen were repairing and securing the hospital.

(2) The doors and windows open to the westward blinded by gabions were filled with earth to secure them against Lorrain battery.

(3) Engineer was instructed to erect another traverse to secure the sick in the hospital from being injured.

A few days later, enemy opened a battery of 2 guns from the cook room of the New Hospital and still later opened another battery to the right of the New Hospital.

The Council reporting on the comparatively small loss sustained during the siege with so much fire (Artillery from the enemy) pointed out in a consultation dated 26-1-1759 that " we were not provided with any bomb

proof lodgments, except that which we have made our hospital."

After the enemy ran away, all these places were examined again and the following observations were recorded.

(1) The battery to the left of the Old Hospital was built among the ruins of the house.

(2) The other battery was in front of the New Hospital where Company's Garden House formerly stood.

(3) "In the enemies' hospital (in Black Town) were found 44 sick and wounded soldiers, without one person to attend to them. They, however, found that humanity in their enemies which was denied them by their General. Immediate orders were given that the same care should be taken of them as of our own people and the greatest part are since recovered." This refers to Lally's sudden retreat from Black Town.

HOSPITAL TEMPORARILY LOCATED IN ARMENIAN STREET, BLACK TOWN

After the seige, cemeteries were regarded as a salubrious site, and the hospital was moved, in February, 1759, to the ground in Armenian Street which was occupied by the Capuchin and Armenian churches.

In September 1762, the priests petitioned for the restoration of their lands. "It is now past 3 years and a half since your Honour, *etc.*, was pleased to take their Chapel and make use of it as an Hospital for the Troops. They are reduced to the necessity of celebrating Divine

Service in a private house ; they are destitute of a burying place, and your petitioner and his companions of a lodging for themselves, as the spot of ground your Honor has taken served them for all three steads."

The Government could not shift the hospital immediately and offered to pay a monthly rent of Pags. 15 for each church. But, the Council fully recognised the insanitary condition of the site. "The temporary hospital which has for some time past been used for the reception of the sick and wounded has not only occasioned a constant annual expense, but have been far from healthfull. *The Board therefore thinks a proper building ought as soon as possible to be erected, and accordingly order the Engineer to consult the Surgeons and lay before them with all convenient expedition a plan proper for receiving and accommodating 500 men and thirty officers.*"

DR. ROBERT TURING, WAR SURGEON

Robert Turing, Surgeon of the wandering Hospital, came to Madras in 1752—53, as, Second Surgeon and one of the Presidency Surgeons. He became the Chief Surgeon, after Munro's death. His name first appears in the records as Surgeons' Mate at Fort St. David about 1729. Later he was Surgeons' Mate at Fort St. George. He was sent, in 1737, to act as Surgeon at Fort St. David, and from there, he was posted to Vizagapatam from which station he was transferred to Madras.

During the French siege of Madras, in 1758-59, the reports on the Hospital (then temporarily shifted

inside the Fort) are signed by Robert Turing. (See statement showing the sick and wounded in the Hospital).

Robert Turing continued to be one of the Presidency Surgeons for nearly a decade. All reports suggest that he was an able and popular surgeon. Turing's house was also a wellknown landmark in the City, in the XVIII century. It was situated somewhere near the present Harris Bridge, and many passages in old records refer to it. Towards the end of his life, Turing left the profession, in 1764, to become an administrator, as did Dr. Bulkley, half a century earlier. He did not, however, live long after he took up the appointment of the Store-Keeper-General. He passed away on the 26th of December 1764.

CHAPTER XV

Surgeon-General to the Army

REGULATIONS FOR THE GUIDANCE OF THE SURGEON-GENERAL, MR. BRIGGS

In December 1760, a surgeon-general was appointed and the following regulations were issued for his guidance, from which, it appears that he was placed at the head of the Medical Departments of both services.

Extract from the Proceedings of Government, Fort St. George, 1st December 1760.

"In consequence of a Minute of Consultation the 7th of last month for remedying the irregularities which have been introduced in the management of the Camp Hospital, the following regulations are now made and ordered to be observed for the establishment thereof:—

That after the rate of two pagodas a month be deducted from the pay of patient, and the Company to defray all the surplus charge.

The sick to be provided with such diet as the Surgeons shall think necessary for their case. If the victualling can be performed by contract on the same terms as in this garrison it will be most agreeable in all respects."

"Resolved that MR. BRIGGS be Surgeon-General to the Army, and that he be allowed ten shillings a day for that duty, which is to be as follows:—

"He is not to be embarrassed with the charge of any particular corps, but to superintend the whole, as well the General Hospital as the sick in the field.

In the first place, he is to take an exact account of all hospital stores, clothing and medicines belonging to the Company now remaining, and to indent from time to time to Madras for what further may be wanted, so that no stores, clothes, or medicines may be purchased in camp; and whenever he may have occasion to indent for new supplies, he must at the same time send in an ' account remains."

"The Surgeon-General is to have under his charge and direction all stores and medicines, and to issue them as occasion may require, and to take care that such servants as are really necessary for the duty of the hospital be employed at the Company's charge, and no more.

"All the other Surgeons to report to him the state of the sick and other occurrences in their several departments, and he only is to make general reports to the Governor and Commander-in-Chief.

"He is to cause regular accounts to be kept in the hospital, expressing the name of the patient, his disorder, the corps to which he belongs, the day received, and the day he died or is discharged, so that the contractor (supposing the hospital to be victualled by contract) may be duly paid conformably thereto at the end of every month.

"He is also to cause a particular account to be drawn out at the end of every month for each of His Majesty's regiments, debitting the same for the charge incurred for victualling the patients and crediting for the sums received by deduction as above from the men's

pay, which account must be certified in the following manner :—

" A like account is to be drawn out monthly for the men of the Company's corps, signed only by the Surgeon-General, and the Paymaster at the camp is to pay the several balances to the Contractor upon his producing the said accounts regularly signed and certified as above, and not otherwise.

" The Surgeon-General is to cause like accounts to be drawn out for the several Regiments for the time past since the taking of Waldour in as exact a manner as possible from the accounts that have been kept, in order that the same may be certified by the Commandant of each corps.

" If it should at any time happen that the victualling of the hospital should not be contracted for, the Surgeon-General is then to cause the patients to be victualled at the Company's charge, and the several accounts above mentioned are in that case to be debited for the real charge whatever that may happen to be.

The Surgeon-General is allowed a writer to keep the above accounts.

" Agreed that MR. BRIGGS have the allowance of ten shillings a day from the time he was appointed to act as Surgeon-General and that instructions be now prepared for him agreeable to the foregoing plan.

Ordered that a copy of the above regulations be sent to Colonel Coote, and that he be desired to give the necessary orders that they may be complied with.

"As a great charge will be incurred, besides that of victualling the hospital, and which on behalf of the Company we do take upon us to hear, It appears but reasonable that the medicines which His Majesty sends out yearly for his Regiments be delivered to the Surgeon-General for the general service, and it is agreed to request of Colonel Coote to give orders accordingly.—(Sd.) GEORGE PIGOT and Council."

MEDICAL ESTABLISHMENT IN 1771

In April 1771, Government published a list of all Medical officers on the establishment, in the order in which they were to rank in future, and also posting them to their respective stations. There were seventeen Surgeons, three Mates or Assistant Surgeons, and eight (?) Hospital Assistants, which last were not to rise above that grade.

They were posted as follows :—

	Surgeons.	Mates.	Hospital Assistants		Surgeons.	Mates.	Hospital Assistants
Madras ...	2	2	1	Ellore ...	2	–	1
Vellore ...	3	–	2	Vizagapatam ...	–	1	–
Trichinopoly ...	3	–	1	Palamcottah ...	1	–	–
Cuddalore ...	1	–	1	Madura ...	1	–	–
Masulipatam ...	1	–	1	Poonamalle ...	1	–	–
Ganjam ...	1	–	1	Chingleput ...	–	–	1
				Chicacole ...	1	–	–

CHAPTER XVI

The Origin and Early Days of the Madras General Hospital

THE FIRST HOSPITAL BUILDING ON THE PRESENT SITE

As early as 1767 it was recognised that the retention of the hospital in the church and cemeteries of Capuchin missionaries was very undesirable. The surgeons and the engineer were asked to select a site for the new building, in a consulation dated 23rd February 1767. There was little progress during the next three years.

But CALL, the Engineer, sent in the following report in February 1770 just on the eve of his retirement :

'After surveying every spot within the walls or near the town, I am still of opinion, none is so proper for an hospital as that where the Company's Garden House formerly stood, now called Hoghill; and according to the dimensions of the ground there, I leave with the engineer *a plan calculated indeed with good conveniences and accommodations for 600 men and about 20 officers, the whole to be terrased and built in chunam. It is true the plan is expensive and large, but as one third or half of it may be built at once, to be augmented afterwards, I thought it best to project it as large as the ground would permit.*

It was proposed that the body should be constructed first at about 1/3 of the total estimated cost of 85000, pagodas and the wings added later. The Council agreed

that the airy situation of the Hoghill was the proper place for the hospital but considered the proposed expenditure prohibitive. They therefore called for a moderate design. While this correspondence was going on, the two surgeons of the hospital (STEPHEN BRIGGS and GILBERT PASLEY) submitted a strong and pressing memorandum to the President and Council in December 1770.

"The situation of the sick during the late rains having been so truly deplorable, we think it a duty incumbent on us, as men and as surgeons to the hospital, to represent to the Hon'ble Board the necessity there is of finding out some remedy against the dangers they are exposed to in every monsoon, and even in less inclement weather. The dangerous inconveniences they sustain may be easily estimated by reflecting on the bedridden influxes, *inflammations* of the liver, fevers and salivations having no other defence against wind and rain but open straw sheds, which, in spite of continual repairs, are puddles every heavy shower that falls......

"A splendid or an expensive building for an hospital we look on as very unnecessary; but we beg leave to think that some convenient and economical plan might be contrived to answer every purpose of an hospital, and such we hope you will be pleased to take in your consideration."

Before anything could be done, MONTRESSOR was superseded by Lt. Col. PATRICK ROSS in 1771. Ross had a long and distinguished career as Engineer in Madras for more than 3 decades making many alterations and additions to the fortifications and the buildings of

Madras. Soon after his arrival, Ross opposed the double block of buildings for Hospital estimated to cost about 46,500 pagodas. The levelling of Hoghill had to be done. Offices were also to be provided by the side of the hospital and the whole block of buildings were to be enclosed by a wall. The Surgeons, however, advocated large airy wards. The chief engineer said that the 20 feet rooms would enhance the cost to 55,500 pagodas. In May 1771, tenders for the hospital were invited. PAUL BENFIELD and JOHN SULLIVAN submitted proposals. Though BENFIELD was a better expert in building. SULLIVAN was given the contract, as his estimate for the hospital was lower amounting to only 42,000 pagodas. Even then, Col. Ross, who had already exhibited a preference for inverted aches, then being tried in Madras by BENFIELD, caused to be introduced some of "the ornaments in the elevation of the hospital" which was ordered to be constructed as plain as it could be. The work progressed satisfactorily and in February 1772 the Council of Fort St. George wrote to the Company.

"We informed your Honors......We had been under the necessity resolving to erect an hospital, an arsenal, and godown for preserving grain. The hospital is building on the very spot which Mr. CALL recommended. It is calculated to contain 300 men, and more than half of it is now completed."

Meanwhile the capuchin missionaries again requested enhanced rent for the church compound in Armenian Street and in 1771-72 the Council decided as follows :—

'As the new Hospital is entirely finish'd, and We have no further Occassion for the Church House and Garden which was taken from the Capuchins for that purpose, it is Agreed to restore them, and they be permitted to build their new Church on that same Spot unless, upon enquiry and report from the Engineer, it should appear to be inconvenient by being too near the Esplanade, in which case, by the Company's Orders, they are to be paid 1,000 Pagodas, and to be permitted to carry away the materials of the old Church.'

It is on this spot, that the new Church, the present Cathedral in Armenian Street, was built three years later.

The building of the hospital and the arsenal at this time led the Council to discover and appreciate the talents of native masons and workmen.

By October 1772, the Hospital had been finished and the sick installed there. It appears to have consisted of 2 blocks. COL. LOVE identified them as the westernmost part of the present edifice. They were built on one floor only but were designed to carry a super-structure.

SOME MEDICAL WORTHIES OF THE PERIOD.

STEPHEN BRIGGS

Stephen Briggs came out to India in the King's service. He was appointed as Surgeon's mate at Fort St. David in the early part of 1756. He became a full surgeon in July, 1759 and in December 1759, was given the title of Surgeon-General, as P. M. O. of the Army. He was allowed to draw an extra allowance of 10 shillings a day, on account of the additional responsibility.

The post was abolished after some 3 years. It was felt that there was no necessity for a Surgeon-General, the troops having returned to the contonments. On the abolition of the post of Surgeon-General of the Army, Briggs was appointed on 30-1-1764, First Surgeon of Fort St. George vice James Wilson, Senior, returning Home. Gilbert Pasley was the second surgeon. They jointly acted as an informal Medical Board, giving their opinions to the Government on all kinds of professional matters, which were referred to them. They also issued orders to the Medical Department. About 1767, Briggs was directed to inspect and report on Vellore Hospital, about which complaints had been received. Briggs retired in February 1771 and sailed home.

GILBERT PASLEY

Gilbert Pasley, who succeeded Briggs as Senior Surgeon in 1771, came out to India as Surgeon's Assistant with Aldercron's regiment—the first British Regiment to serve in India--along with the first officers of the A. M. D., to serve in India. When he was an assistant surgeon, Pasley knew Governor Pigot. He was esteemed well qualified in his profession. About the early part of 1761,he was at Pondicherry and applied to the Company for an appointment as Surgeon. Within a year of his entering service, Pasley was appointed to officiate as Surgeon of Fort St. George. A consultation dated 10th December, 1761, contains information of his first appointment and the circumstances under which it was made. "Mr. James Wilson, (Junior) one of the

surgeons of this settlement being diseased, Mr. Alexander Boswell, who is the next in turn is appointed to succeed him but as he is at present with the Nabob who may be desirous of his continuing with him, agreed that Gilbert Pasley, who is now with the army, be ordered to Madras to officiate in the room of Mr. Boswell". It may be added here that Boswell never took up the appointment. So, Pasley held the appointment for the rest of his life.

DR. PASLEY'S EVIDENCE REGARDING LORD PIGOT'S ILLNESS

Dr. Pasley figures prominently as the Medical attendant of Lord Pigot during the latter's fatal illness in 1777. Dr. Pasley considered sea air desirable for the imprisoned ex-Governor and the Government agreed to offer Lord Pigot the use of the Company's garden house (the present Government compound on the southern bank of the river Cooum). A despatch from the Government to the directors giving an account of Lord Pigot's sickness and death including the circumstances attending his Lordship's situation before his death indicate the high opinion that the Government had of Dr. Pasley. "We have likewise called upon Mr. Pasley the Company's head Surgeon, who attended His Lordship during the whole period of his disorder, and who is a Man of strict honour and veracity, to lay before Us a particular Account of the nature and cause of that disorder, and the progress of it in every stage from the time his Lordship was first taken ill until His Death."

At the inquest held by Coroner at the Company's garden house, Surgeons Pasley and Anderson considered that an autopsy was unnecessary.

Dr. Gilbert Pasley deposed that he knew Lord Pigot in 1756 when the witness was an assistant surgeon and that he attended Lord Pigot in his illness, " the nature of which was bilious fever and liver congestion." Dr. William Mallet, surgeon to the artillery at the Mount, also gave a deposition. Later, in the course of a statement before the Sessions Court, Dr. Gilbert Pasley deposed that 'His Lordship being of an active disposition was seldom unemployed. His usual amusement was working in the garden before noon, and I have heard that he amused himself in repairing tanks and houses.' After recovering from his first illness, he relapsed 'owing to his going abroad too soon, and not using the precautions he was advised to.' Pasley considered that Lord Pigot's illness was due to exposure and did not arise from his confinement. 'He died of a slow visceral fever, partial suppurations in the substance of his liver, and putrid bile.' After his transfer to the Garden House, Lord Pigot was somewhat better for three or four days, 'but some violent exertions, and exposing himself to cold and fatigue, threw him back again, and brought on severe shivering.'

A SPECIMAN OF MEDICAL CERTIFICATE DATED 1776

"These are to Certify that Brigadier General Sir Robert Fletcher having long laboured under complaints

of his breast, with a Cough and feverish Disposition, and being now much reduced and weakened by them, a Change of Situation is become Absolutely necessary'

"The approaching Monsoon, and the tendency his complaints have to consumption, renders it incumbent on him speedily to take the Benefit of a Voyage to sea. He is therefore advised to proceed to the Cape on the first conveyance, as the most probable means to effect a recovery. GILBERT PASLEY, Surgeon."

Pasley was also given the title of Surgeon-General on 25th March, 1780, with a special salary, in addition to his previous pay of 180 pagodas a month. In addition to his medical duties, he acted as Agent for Military Clothing, about the year 1763 and 1764. Pasley was buried at Madras on 23-9-1781.

JAMES ANDERSON

When Pasley was promoted first surgeon, Samuel Scott was appointed second surgeon at Madras. James Anderson, who was then in Tanjore complained of his supercession by Scott and represented that, with the single exception of Joseph Hinchley, the senior most surgeon in service (who did not want to come to Madras) he was the next in seniority, after Briggs and Pasley. The Madras Government declined to reconsider their order. Scott died in Madras—a year later, (21-4-1772). Anderson was then appointed to the vacancy. About 1780, on Pasley's recommendation, James Anderson, was appointed Surgeon Major, with a salary of 100

pagodas a month, presumably in addition to his pay and allowances as Surgeon. A year latter, in 1781, on Pasley's death, Anderson was appointed Surgeon-General.

In January 1786, the Council of Fort St. George appointed a Committee of 3, Surgeon-General Anderson and the two surgeons next in seniority, to frame rules for the Medical Department and next month, a Committee to administer the Medical Department was formally appointed. Dr. Anderson was referred to, about this time, in official correspondance, as Physician general. Dr.Lucas, the chief surgeon requested to be styled Surgeon-General. Finally in April, 1786, under the orders of the Court of Directors this committee was superceded by the Hospital Board, newly constituted. It was composed of James Anderson, Physician-General; Colley Lucas, Chief Surgeon; and Thomas Davies, Head Surgeon of the Presidency General Hospital.

Anderson lived, in the later part of his life, in Nungumbakkam, occupying a house, now known as Pycrofts Gardens.

The following extract from Mrs. F. E. Penny's book "On the Coromandal Coast" gives futher, particulars of Anderson as a Botanist and his contributions to science. "Anderson was a great botanist, and might be called the pioneer of the Botanical Gardens of Madras, although he had nothing to do with the present Agri-Horticultural Society and its beautiful grounds in Teynampet (founded in 1835-6). His experiments were confined to his own private garden, where he cultivated plants with a view

of developing the indigenous resources of the country and of naturalising foreign plants of mercantile value.

"A visitor to Madras in 1792 described him as being at that period an elderly man and somewhat infirm.* The garden was shown by an assistant. There were a number of flowers and fruits foreign to Madras. Some of them, the loquat, pommelo (grape-fruit), custard-apple, and papaw, are well known at the present day. The papaw, a friut like a peer-shaped melon growing upon a small tree, is rich in digestive property, and yields a drug which is used in medicine."

"He corresponded with Sir Joseph Banks, sending him a great deal of information that is now incorporated in staddard works on botany. He especially directed attention to the cultivation of sugar-cane, coffee, and cotton, cochneal, Mulberry, which plants in the present day are permanently established in different parts of the Presidency."

"At his death a number of plants were removed from his garden in Nungumbakkam to the compound of a house in Saidapet on the Mount Road. There they

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* Col. Love adds the following footnotes :—

'This distinguished man, to whom so many references have in these pages been made, died in 1809, at the age of seventy-two. after a service of nearly half a century, He was buried in St. Mary's Cemetery, where a monument, provided by his nephew, Dr. Andrew Berry, marks his grave. The officers of the Madras Medical Department subscribed for a seperate memorial, which was executed by Chantrey, and erected by the west doorway of St. George's Cathedral.'

were carefully tended by another botanist, and experiments were continued until 1836. The work by that time had grown too big and too important to be left to private enterprise. The Agri-Horticultural Society was formed, and Robert Wight, an eminent and enthusiastic botanist, became its honorary secretary. He threw himself heart and soul into the creation of the beautiful gardens of which Madras is justly proud."

"As late as 1877, there might be seen in the compound of Pycroft's Gardens and at Saidapet strange trees and shrubs foreign to Madras, the relics of Anderson's efforts when he dreamed of the possibilities of the fertile soil of South India.

"Roused by the example of Anderson and other scientific men, the Company began to turn its attention to scientific research. With crushing of the power of Tippoo Sultan the country became more setteled. The battlefield no longer required the undivided services of the medical faculty, and men had more leisure to devote to any branch of science that promised to be useful."

GARDENS OF DR. ANDERSON, EXEMPTED FROM QUIT-RENT

An extract from records of 1791, says Government resent the liberty which Dr. Anderson has taken in appropriating more land for his use than was allowed to him by his grant. They, however, recommend to the Court of Directors that his gardens may be exempted from quit-rent on account of his great zeal and industry,

which has rendered cultivable the most barren part of Madras. The Council of Fort St. George passed orders in 1793 exempting Dr. Anderson from paying quit rent. In accordance with the wishes of the Court of Directors, Government direct that no quit-rent should be levied from Dr. Anderson, on account of his lands *etc.* in Madras. The position of the garden is indicated by the following.

"The Road Committee complain to the Collector that people residing near the roads are in the habit of making encroachments on them and that this is especially the case with the road leading from the new bridge near Anderson's Gardens to the river at Chintadripettah. They request the Collector to examine these roads and remove encroachment". But by 1821 the Collector proposed that the botanical gardens of Dr. Anderson may be assessed with quit-rent as they had ceased to be utilised for the orginal purpose for which remission was allowed. The gardens were divided among several people after Dr. Anderson's departure. The Government ordered that no exemption is to be made in respect of quit-rent due from lands which formerly belonged to Dr. Anderson. The remission was to be in force only so long as his botanical pursuits were continued.

After much enquiry by many local officers Col. Love identified the site,

"Dr. Andersen's botanic garden, one of the show-places of Madras, which originally occupied the sites of Pycroft's Gardens, Tulloch's Garden's and perhaps

Graeme's Gardens, had been extended northward to College Road and eastward to the river."

REGULATION AND SUPERVISION

A letter from Fort St, George to Bombay in 1777 describes the procedure followed in the hospital, about that time.

"The Surgeons in general at this Place have a Contract with the Company for supplying every necessary Article to the Hospital......at the rate of five fanams per Day each man, reckoning 36 fanams per Pagoda. The victualling of the Hospitals is likewise by contract at three fanams and Twenty Cash per day each Man, reckoning 36 fanams per Pagoda, from which is deducted 2 pagodas per Month, or 2 Fanams 64 Cash per day, out of each Man's Subsistance, paid by the Commanding Officer of each Company to the Contractor at the Rate of 42 fanams per Pagoda.

'Should European Medicines or Instruments be wanting, the Surgeons apply to Us for leave to purchase them. Country Medicines are supplied by the Surgeons, being included in the Contract first mentioned for every necessary Article.'

Col. Crawford gives numerous extracts from official records. A few paragraphs from his learned book are enough to show the general policy and actual practices, relating to Hospital and Medical Department.

"The Madras Military Cons. of 12th November, 1782, contain an order that two members of the Council are to visit the General Hospital every week, and report

its condition to the Committee. The same Cons. of 20th June, 1783, contain new medical regulations, chiefly on superintendence of medical stores, indents, *etc.* These regulations are long, filling ten folio pages. They were approved and brought into force four days later, on 24th June."

In the Military Cons. of 28th January, 1794, it is laid down that the control of the management of the hospital is entrusted to the Head Surgeon at the Presidency, and that diaries must be kept by every Surgeon and Assistant Surgeon attending the hospital.

Orders issued in the Fort. St. George Gazette, of 9th December, 1814, turned the General Hospital into a Garrison Hospital.

"The appointments of Surgeon and Assistant Surgeon of the General Hospital are abolished, and that Institution becomes the Garrison Hospital of Fort St. George, containing as at present a receptacle for Patients not belonging to the Garrison, in conformity with existing Regulations. The monthly allowance of fifty Pagodas for medical expenditure now drawn by the Garrison Surgeon, is discontinued.

"The Assistant Garrison Surgeon of Fort St. George will hereafter invariably have charge of the Dispensary, and will receive for that duty an increased allowance of fifty Pagodas monthly. He is removed from the control of the Medical Storekeeper, and will reside constantly in the Fort.

"The Assistant Surgeon of the Black Town will hereafter be an Assistant under the Garrison Surgeon.

He will have charge of the Black Town, the Jails, and the Native Infirmary, and will reside constantly in the Black Town.

"The following appointments will take place.

"Mr. Surgeon S. Heward, to be Garrison Surgeon of Fort. St. George.

"Mr. Assistant Surgeon R. H. Stuart to be Assistant Garrison Surgeon, and Superintendent of the Dispensary.

"Mr. Assistant Surgeon T. Sergeant, to be Black Town Assistant Surgeon, under the new arrangement.

"Mr. Assistant Surgeon Underwood will have medical charge of the Male and Female Asylums, and will reside in the vicinity of those Institutions."

ADMINISTRATIVE AUTHORITY FOR MEDICAL DEPARTMENT

The following account and extracts are from Col. Crawford's work.

"The Madras Medical Board was constituted on 14th April 1786, a month earlier than that of Calcutta, as recorded in the Madras Mily. Cons. of that date. It was of course, formed in obedience to the orders conveyed in the Court's letter of 21st Sept. 1785. But earlier in the same year the Madras Council had determined to introduce a somewhat similar method of medical administration. The same Cons. of 1st Jan. 1786, contain a long minute by Sir John Dalling, the Commander-in-Chief, on the Medical Department. This minute, with another minute on it by Mr. Daniell, a Member of Council, and Dalling's reply, fill eighty-nine folio pages.

On 17th Jan. the Council determined to adopt the system proposed by Dalling, and to appoint a Committtee of three, Surgeon General James Anderson, and the two Surgeons next in seniority, Colley Lucas and Arthus Sinclair, to frame regulations for the Medical Department. The report of this Committee is contained in the Cons. of 1st Feb. On 3rd Feb., the Commitee to administer the Medical Department was formally appointed, consisting of James Anderson, Colley Lucas, and William Horsman, Surgeon of the 73rd Highlanders."

Under orders which arrived in April, 1786 the department was headed by a Physician-General as Director of Hospitals on £ 2,500 per annum, and the principal officers were a Chief Surgeon on £ 2,000, and the Head Surgeons of Hospitals, who were eligible for £ 1,500 or £ 1,000 according as the garrisons for which they were responsible consisted of more or less than 8,000 men. The regimental surgeons were to draw the pay and allowance of Captains of European infantry. The department was to be administered by a Hospital Board comprising the Physician-General, the Chief Surgeon, and the Head Surgeon of the Fort St: George Hospital, the three senior posts being conferred on Dr. James Anderson, Mr. Colley Lucas, and Mr. Thomas Davies respectively.

The organization was evidently framed on a military basis, and no special provision was made for medical attendance on civil servants. Cases were ordinarily treated at the General Hospital but there

appears to have been a dispensary in Fort. St. George as we hear of a water supply being laid on to the Doctor's Shop in the Fort.

The Senior officers of the Madras Service at this time stood in the following order—

James Anderson, 1762.
Arthur Sinclair, 6th June, 1763.
Colley Lyon Lucas, 9th Jan., 1764.
William Raine, March, 1764.
Thomas Davies, 13th Aug., 1764.
William Gordon, July, 1759.
James Whyte, June, 1765.
Robert Turing, 1st Aug., 1766.
William Duffin, July, 1767.

DUTIES OF THE MEDICAL BOARD

Two Madras G. O.'s of 1794 give the duties of Members of the Medical Board and of Superintending Surgeons respectively.

G. O. 29th Jan. 1794. "As the Regulations for the Medical Department, published in the Orders of Government of the 4th ultimo, do not define with sufficient accuracy, the Duties to be exercised by Head Surgeons, the Honourable the President in Council is pleaed to declare, that it is the particular province of the Head Surgeon to visit every Hospital in the District, European and Native, as often as may be practicable, to have free access upon all occasions, to the sick whether in Hospital or Barracks, and to give such directions

regarding them as he may find expedient; to see that the Clothing, Bedding &c. be complete and sufficient for the number of sick, and that the Diet be good and wholesome, and conformable to the Diet Tables laid down; that due cleanliness be preserved in the Hospital, and that proper Medical attendance be provided; at the end of each visit, the Head Surgeon is to report to the Hospital Board, the state of every Hospital, particularizing for the information of Government such matters, requiring redress, as may occur."

G. O. 19th March 1794. "As the regulations for the Medical Department, established during the Government of Sir Archibald Campbell, do not accurately define the specific duties required of the Senior Members of the Hospital Board, in regard to a personal superintendence of the different Hospitals on the Coast, the Honourable the President in Council has been pleased to resolve, that the Physician-General and Chief Surgeon, shall alternately visit the Hospital at the Presidency once a week, and that the Chief Surgeon Shall once in every year, at such time as may be approved by the Hospital Board, proceed to each of the other General Hospitals on the Coast, and make enquiry into every matter relating to them and to the conduct of the respective surgeons, taking especial care, that the President in Council be made acquainted through the Hospital Board, with all circumstances necessary for his information."

GLIMPSES OF MADRAS GENERAL HOSPITAL, PRIOR TO THE OPENING OF THE MEDICAL SCHOOL IN 1835*

"Of the two *assistant apothecaries* who worked in the Hospital, one had charge of the stores and the other the surgery (or dispensary). The assistant apothecary in charge of the Surgery or dispensary was the senior of the two. He was to attend to the correct compounding of medicines and he had control over the "candidates" attached to the Surgery and the compounding of medicines. The apothecary in charge of the stores was to supply medicines on indent from the apothecary in charge of compounding. He kept account of the issues made and noted down the quantities remaining, and cut short in the indent the expenditure of such medicines, as were running short in store. He attended to the orders given by the Superior Medical officers of the Hospital, and he looked to the filling up of the prescription book. This arrangement was latterly reversed, the Senior Assistant Apothecary was placed in the stores and the Junior in the Surgery. There were 4 apprentices attached to the hospital, who were each assisted by a "candidate." These were under the orders of Assistant Surgeons in charge of wards.

"Before the advent of Dr. MORTIMER (in 1828) who was known as a strict and stern disciplinarian, the

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* (Extract from an article of a Medical apprentice of the pre-school period.)

condition of the hospital was the reverse of what I have stated. The assistant apothecaries were men who were anything but good. Subordinates and apprentices were equally so. So far as discipline was concerned there was none. The hospital was far from clean. The lighting of it was bad. A solitary *mullay* with some oil and a wick in it placed on a wooden stand in the middle of the ward, was all the light that could be obtained. Drinking water was kept in large earthern pots, more often open than otherwise, in the centre of the wards, with an old tin pot over them. Dressers and medical pupils did what they now do in European Hospitals *i. e.*, dress sores and blisters, and they were required to have always a supply of dressings, chiefly in use for emergencies, but they were not instructed nor had they received the slighest instruction in medical matters. The number in hospital on an average was a little more than 100, sometimes 130; apprentices in my day were chosen from the candidate class. In conclusion, I would remark that the good constitution of the hospital was not arrived at in a short time. It took years of patient working to accomplish it. It began after the appointment of Dr. MORTIMER as Permanent Assistant to the General Hospital. He had, however, the pleasure to know that his hospital was considered the model hospital in the Madras Presidency, some years before he left the service."

"The Garrison Surgeon had no commissioned assistant until 1827. In the case of the General Hospital, a Mr. WILKINS who had been Hospital Sergeant

of H.M's 84th Regiment, and who had an English diploma, was employed by Dr. ANNESLEY as his assistant in the treatment of Europeans, and Sub-Assistant Surgeon Stone in the treatment of females and natives. Dr. MORTIMER was the first permanent assistant allowed to the Garrison Surgeon in the General Hospital. He did all the business except the important papers which were signed by the Garrison Surgeon. He resided on the spot and performed all surgical operations. He had also the directing and controlling of the treatment of all the patients under the care of the Probationary Assistant Surgeons whose journals he inspected monthly and made comments on them previous to their being sent to the Medical Board for approval."

TRAINING FOR MEDICAL SERVICE BEFORE 1835

At the beginning of the XIX century, subordinate medical attendents of hospital were in many instances private or contract servants. From 1827, when Government organised subordinate establishment, there were two separate branches of subordinate medical service with different rates of pay. One was composed of persons who were either Europeans or descendants of Europeans and Eurasians some of whom were drawn from among the orphans or the Madras Asylum. The other consisted exclusively of natives. The two branches had the following designations:—

European descent	*Natives*
Apothecary	First dresser
Second Apothecary	Second dresser
Assistant Apothecary	Medical pupil
Medical apprentice	

To supply the vacancies in the two branches, volunteers were enrolled and were paid a small stipend for their subsistence. After a preliminary attendance at the hospital, these candidates were reported qualified. As vacancies arose, they were brought on to the establishment as medical apprentices and "native medical pupils" according to their parentage, and distributed as pupils for the purpose of acquiring a practical knowledge of hospital duties. A certain number of these pupils were selected to do duty at the General Hospital and other presidency hospitals. After varying periods, the surgeon of the hospital submitted the names of apprentices or pupils from among the more advanced students, to fill up the vacancies in the subordinate medical establishment. In short, the course was a practical one, limited to observing the practice of the hospitals. There were no classes. There was no systemic teaching of chemistry or physiology, materia medica or pathology

"The *apprentices* had to keep the journal of treatment and cases of sick committed to their care. They had to enter in the journal the name, rank, age, temperament of the patients, date of admission and discharge with an index of the pages. The apprentice

and the candidate served out the medicines that were made by the candidates attached to the dispensary. The apprentice prepared the diet sheet for patients, making the changes in diet according to the nature of the disease, date of admission and discharge or death of patients. He also wrote and put up the docket on admission. These diet rolls were afterwards conveyed to the office. There was a rough and a fair prescription book. The prescription in the journal was written by the Assistant Surgeon, from which the apprentice copied out. In serious cases, the apprentice had to note the change that took place in the state of the patients between the visits of the medical officers, the number of evacuations by the mouth or bowels and their color. The apprentices and candidates had to live within the premises of the hospital, and they were not allowed to go out except with the permission of the permanent Assistant Surgeon. They had to attend divine service on the visit of the clergyman appointed for that purpose. *In all cases of cholera or other dangerous diseases, the apprentices and candidates kept watch at the bed-side of the patient, and noted the progress of the case.* Each apprentice was relieved every two hours. During the time of his watch, he served out medicines to patients in the hospital who had to take them during his watch."

"After all the senior apprentices left the Hospital, Dr. MORTIMER formed a class of the younger apprentices and candidates whom he ordered to copy out certain portions of a printed book upon Physiology. The best informed in the subject was made monitor, who was to

exercise the class in the subject twice or thrice a week. The monitor also taught the students the names of the bones, *etc.* Dr. MORTIMER also got two pasteboard models, from which the students learnt muscles. The monitor received information from Fife's Anatomy and letters of reference were put on each muscle for the guidance of students, and it was from this source that the early Text book was framed for the first Class of Students when the Medical School began its operations in 1835. The book was called Mortimer's Manual of Anatomy. Going back to 1828, and the years that preceded the establishment of the Medical School in 1835, I remember Dr. MORTIMER would be a looker on, during the time the monitor was exercising the class, and sometimes he would order the class to come to his quarters and exercise them chiefly upon the organs of the body and their functions. In short, this class was the nucleus of the Medical School. The lads were also taught to bleed, apply leeches and blisters, and dress sores of every description. Every boy was supposed to rise at 5 a.m., dress himself, roll up his bed like a soldier, and remain dressed until 8 p.m. He was not allowed to sleep during the day, and such was the regularity and punctuality with which work was done, that the General Hospital at the period I speak of (between 1828 and 1835) earned for itself the name of the model hospital. But it was not always so."

CHAPTER XVII

Other Medical Institutions of the xviii Century

A SANATORIUM AT ST. THOMAS MOUNT

The Council of Fort St. George recognised, about the year 1705, some necessity for a sort of adjunct to the Fort Hospital, a sanatorium, in our modern parlance, to be located at St. Thomas Mount. "The Mount House being for several years past very crazy and irreparable, insomuch that is now upon dropping down, 'tis therefore ordered that the paymasters sends People to pull it down and take care of the materials. And in regard that we have in a manner daily experience of the *great necessity of a dwelling House there for sick persons, to repair to, for the recovery of their healths, Tis* agreed that another House be built there in the most commodious Place the Governour shall think fit, and direct the same." The western fringe of the present limits of Madras, seems to have been then, as now again, a fashionable health resort for the èlite of Madras. George Heron was permitted to build a private house at the Mount for the sake of his health and soon after, other prominent people of Madras built summer-houses, to which they retired on hot days.

CONVALESCENT HOME AT EGMORE

Another development of this period may be mentioned here. The company ordered in 1711 "a Guard

House to be built by the side of the Egmore village and within it, a *small convenient place to lodge our soldiers when there shall be occasion for their being sent thither* and may be commodious *to lodge and accomodate your sick soldiers at any time when they arrive here sickly, and out of order, which may be occasion'd by any long passage from England* hither without touching anywhere from England as has happen'd to those of your soldiers last come upon the "Susanna" and the rest of your ships, of whom there has been so great a mortality as has consumed most of your Chests of medicines come by your last shipping." A despatch to England in 1711 made a very sarcastic observation on the health of soldiers:—"The officers who raised them (the soidiers) own they got them from the goals and Hospitals whereby one third dye in the voyage and infect the ship; half of which do arrive, are put into the Hospital and many never come out." A plan was sent to England the same year for a Convalescent depot at Egmore "for sick soldiers arriving from England for the recovery of their health, it being good air". In Feb. 1713, the Company wrote approving of the proposal and plans and added. "It would be a relief to the poor soldiers when sick and contribute to saving of their lives." Subsequent correspondence shows that the Guard House, with rooms for convalescent soldiers was built, but at a cost much in excess of the original estimates.

NAVAL HOSPITAL ON ISLAND GROUNDS

In 1744-45 the Fort Hospital was considered scarcely commodious enough for sick soldiers and sailors, and the following order was issued :—

"The Granary on the Island ordered to be surveyed and a report to be given, whether it may not serve the purpose of an Hospital :— Cots and clothing to be provided for the sick men."

The following order states more fully the grounds and the necessity of another institution for the sick :— "It being also considered that it will be much more convenient to have some place ready for the reception of the sick men, that may come ashore from His Majesty's ships, than to mix them with those of the Garrison, besides that the accommodations of our Hospital, are too confined even for our own people, It is agreed and ordered that the Paymaster accompanyed by the Surgeons, do survey the *Granary on the Island* and report to the Board whether it may not be made to serve that purpose ; ordered also that the Paymaster get provided a quantity of Hospital clothing with cots and other things necessary for the sick men." Here is the report submitted to the Board. "The Paymaster acquaints the Board that pursuant to order of last Consultation he has been with the Surgeons to survey the Grainery on the Island which they find may be made fit for the reception of the men of war's sick people by opening a few windows for the benefit of air, and some other small alterations which he computes will not cost above two

hundred pagodas, ordered that he set about them forthwith."

THE FRENCH HOSPITALS DURING OCCUPATION

In the last week of December 1758, in a letter to the English Captain, giving directions for the projected attack on St. Thome, reference is made to the French Hospital in Madras. "In the *French hospital at St.Thome*, some of our own wounded officers and men are there. Take all possible care to prevent their being molested". In a letter addressed to Yusuff Khan, about the same time, it is noted, "The enemy have some sick and wounded people at St. Thome and some of our own officers who were taken prisoners are also there. Give strict orders to your people if you succeed, not to treat them ill".

A later consultation gives the number of sick, "The French had about 200 sick and wounded at St. Thome". It is also interesting to note that the opposing commanders were considerate to some extent. "The Cavalier de Military, being much wounded and desiring to go out on his parole that they may be attended by his own people", was permitted to do so. The existence of a second hospital is also indicated. While congratulating Yusuff Khan on his victory over the French, a letter dated 30–12–58, added that an officer and several men who were wounded in the engagement with the Khan's army that morning were carried to "*Their* (*French*) *Hospital in Black Town*"

NAVAL HOSPITAL IN 1782

Surgeon Curtis of the "Medea," at p. 211 of his work on the "Diseases of India as they appeared in the English Fleet in the Madras Naval Hospital in 1782-83," gives the following description of the Naval Hospital on the Island :—

"The Naval Hospital at Madras consisted of a large square of building, or rather of a shade of one storey, open everywhere on the inner side; and within a few hundred yards of the sea beach; detached from all other houses. A shade open on all sides was constructed within the square, and extending its whole length for the accommodation of patients with wounds, ulcers and sores. And such was the freedom of ventilation through the whole, that no bad sickly smell was ever perceived, except close to some bad putrid ulcer, or patient with a putrid flux. The cheapness of labour, and the liberality of the gentlemen, who had the contract, provided us with servants for sweeping, washing, and all the purposes of cleanliness, to our utmost wish. Ventilation was our only concern; for warmth or shelter we needed to have no care. Under circumstances so favourable, we were led to impute the intractability of our ulcers and sores, rather to the influence of other causes, than to the fault of foul and contaminated Hospital air; either to the effect of local circumstances; the state and situation of the settlement, and of the town of Madras, or to the state of the air and constitution of the climate, inducing a weakened, and relaxed condition of the extreme

vessels, (probably in many instances combined with a latent scorbutic taint), which rendered the healing of ulcers, sores, or the separation of the dead, and renovation of new and living parts, an uncommonly tedious and difficult process. A peculiar degree of acrimony in the matter of sores and ulcers, was also very remarkable, and presented an additional obstacle; and made it very difficult to maintain the proper condition in their vessels for accomplishing the healing process."

"That the influence of the climate, and state of the air, was sometimes connected with these deprivation, we had undoubted proof at the setting-in of the north-east monsoon, on the 14th October 1782, when almost every stump, sore and ulcer in the Hospital got foul and put on a bad appearance; while in the cool and dry weather that succeeded about the middle of November, and during the month of December, they have got better."

STATE OF SANITATION IN MADRAS IN 1782

"The air of a large Hospital might contribute somewhat to the production of this taint; but I am persuaded, the local situation of the town, and state of the settlement at that period, had a very considerable share. The country round was more than once over run and plundered, by the horse-troops of Hyder Ally so that our supply, even of fresh meat, and much more of vegetables and fruits, was by far too scanty. And a few imperfectly cultivated and unripened fruits with the cocoanut juice called *Toddy* was all we could procure for our scorbutics. Another source of unhealthiness arises

from the situation of the town, and Fort of Madras itself, built upon a low, flat and sandy beach and surrounded almost entirely with stagnant swamps, or ponds of stagnant water, which are not only a receptacle for every sort of corruption and filth, but have their edges, as well as the beach on the other side, covered at all hours of the day with natives, in the act of relieving nature from her burdens, to take advantage of the water for washing afterwards, which is their invariable custom. What a source of putrid exhalations under a vertical sun! The streets, lanes and alleys, formed only of beate sand, admitted of no sweeping or cleaning; nor did there seem to exist while we were there, any sort of police for that purpose; or for removing nuisances of any kind. So that if it had not been for the number of Brammany kites, carrion crows, and parrier dogs, together with an innumerable multitudeof large flies, all constantly employed in the office of scavengers, in removing this offensive mass, Madras, in my opinion could not have been habitable."

"Famine was also at this period spreading sickness and death. The miserable natives were daily falling down, an easy and unresisting prey to it, in every street, stall and lane about Black Town. Nor did anybody seem to take any further concern with them at the back of the *Bound Hedge*, (a kind of ditch and bank, planted with bamboos which had served to mark out the boundaries of the first European settlement in India) converted literally at this period into a real Golgotha, the place of many a human bone and skull."

PREVAILING DISEASES IN 1782

"The Naval Hospital at Madras, while I did duty in it, contained double the number of patients stated in the report of the Company's Hospital, very often a great deal more."

"The great bulk of our Hospital cases consisted at all times of ulcers; of the remainder, the proportions and kinds would agree very much with the report given. No exact general lists were, however, kept with relation to practice; and these relating to contract, and the settlements of accounts with Government, could not be much depended on in this respect. Of fevers, properly remittent, that is with a regular diurnal remission, I observed none in India; and I do not know that fevers, observing any other type come properly under this description. In many of our tertian and quartan ages, the patients were not in the intervals entirely free from disorder; so that it might be difficult to distinguish them exactly as remittent or intermittent, and still more with regard to those observing the quotidian form. In the inland part of the country, there may be more regularity. But at the Hospital, the type was very changeable in all of them, and they very readily took on the continued form."

The following list of diseases under treatment in 1782 at the Military Garrison Hospital, under the care of Dr. Paisley is given at p. 210 of Surgeon Curtis's Book:—Extracts from Dr. Paisley's letter:—

"I have added the state of our Hospital (military) at Madras showing you the prevailing diseases along the coast for this month:—

Venereal	...	50
Quotidian remittents	...	2
Simple bilious fevers	...	30
Bilious fevers with visceral obstruction	.	15
Simple fluxes	...	20
Liver fluxes and fluxes from visceral connections	...	98
Chronic visceral obstructions from impaired habit	...	69
Total	...	284

NAVAL HOSPITAL MERGED IN G.H.

"It is clear from these extracts that, in the year 1782 there were two hospitals, one the Military General Hospital, under the care of Dr. J. Paisley, Company's Physician at Madras, and a Naval Hospital on the Island, in which Surgeon C. Curtis did duty. As the number of sick in the Company's Hospital for troops in 1782–83 was 284, the accommodation in it was probably equal to that of the General Hospital as described by the Medical Board in their report published in 1842. There are records showing that the Company's Hospital of 1782 and the General Hospital of 1842 were identical, and

that the later building of 1842 was a gradual development of that of 1782."

" On reference to old records, it will be found that sick sailors from His Majesty's and the Honorable Company's ships, were admitted into the Military Garrison Hospital from 1790 down to 1808, making it probable that the old Granary which was utilised as the first Naval Hospital was disused about 1790 after having served the purpose of a hospital for sailors, for 45 years. From extracts attached to this account, it will be seen that these sailors were a source of trouble to the Medical authorities, as they frequently complained of deficiency of bread and clothing, "badness of victuals," "the victuals served to the seamen being the same as served to the Company's people in Hospital." The head Surgeon Dr. Duffin, in 1791, "gave orders that no man in Hospital shall be paid fanams in lieu of provisions. This order is strictly observed, but the seamen wishing to get fanams instead of meal, in order to procure arrack with it, have taken this mode of revenging themselves for the strict adherence to the Surgeon's orders, and of keeping the meat in the ward nearly a day to produce the same to the Captain when he visits the Hospital."

A NEW NAVAL HOSPITAL AT EGMORE

About 1784, the Madras Govt. found the old naval Hospital unfit for occupation and a newsite was selected in Egmore. But this Hospital was erected only in 1808 on the Ponamalle Road and was merged again in G. H. in 1831.

THE LUNATIC ASYLUM

Assistant Surgeon Valentine Conolly put forward proposals in 1793 for the care and treatment of the insane who were till then dispersed over different parts of the country, or confined in public prisons, producing dreadful consequences. He offered to erect, at his own expense, a commodious hospital for the reception of lunatics. It was to consist of 16 separate and airy apartments with warm and cold baths and every other necessary outfit. The entire area was to be surrounded by a high wall. Servants properly instructed were to be employed in the hospital. The Government was to take lease of the whole hospital on a rent proportionate to the cost of building. All insane officers and privates were to be sent to the hospital and their monthly allowance were to be paid to the surgeon for their maintenance. Insane persons with no friends or relatives in the country and sent to the hospital by the Justices of the Peace or the officers of the Police were to be supported by the Company, according to their former situation in society.

The scheme was approved subject to the final sanction by the Court of Directors. Conolly applied for a large site in Purasawalkam. He planned out a garden to supply the patients with vegetables, a bungalow for the future superintendents and accommodation for a variety of servants. The Asylum was opened on 1st October, 1794. A Mily. Letter dated 18th October, 1794, para 3 states that the lunatic asylum was ready and

that Mr. Conolly was granted 250 pagodas a month for the charge thereof. This asylum appears to have remained his property until he sold it to Dalton. Government paid a rent of Rs. 825 a month for its use. In 1807, Surgeon James Dalton bought the property from Conolly for Pags. 26,000. He rebuilt the whole Asylum, enlarging the accommodation. It was known as Dalton's Madhouse and was situated in Kilpauk, on the site now occupied by the Medical College Hostel.

ROYAPURAM GROUP OF HOSPITALS

According to Col. Crawford, Surgeon William Gordon appears to have been the first to suggest the establishment of a hospital for natives at Madras. On 19th November, 1787, he submitted plans for this purpose to the Council, to the Governor, to the Medical Board, and to the Nawab of the Carnatic. Nothing seems to have come of this proposal at the time, or till after a lapse of ten years.

In 1797, Assistant-Surgeon John Underwood proposed the erection of a hospital and dispensary for the native poor of Madras. He offered to construct the buildings himself if Government would provide ground and pay a rental not exceeding Pags. 100 a month. The cost of establishment was to be met by voluntary subscription and a Surgeon, approved by Government, was to attend the Institution. These proposals were referred to England and in due course, sanctioned by the Court of Directors.

The hospital was completed in 1799 at a cost of Pags. 9800. It was situated in Purasawalkam. The buildings were of bricks in *chunam* and consisted of two substantial blocks each of two wards, with verandahs all round. A detached ward was provided for brahmans who, it was at first thought, would be reluctant to attend. There was also a terraced dispensary. The annual subscriptions amounted originally to Pags. 2500 and soon increased to Pags. 3200. Within a month of the opening of the hospital, it contained 89 patients and several applicants had been refused admission for want of space. The number of in-patients was restricted to 80 and out-patients to 100. The Institution was managed by a Committee and was subject to inspection by the Medical Board. Mr. Underwood, was allowed 150 pags. a month in lieu of all demands for rent and expenses of repairs, and as Attending Surgeon 100 pags. per month.

Monegar Choultry was founded in the year 1808, but why it was named as above, cannot now be ascertained. It afforded shelter, food and raiment to the Native poor, the lame, the halt and the blind of Madras, without reference to caste.

In 1809-1810, funds and patients of Native Infirmary were transferred to the Native Hospital and Poor Fund, to obviate inconvenience of a double establishment. The combined Institution was known as Monegar Choultry. Mr. Sherwood was appointed Surgeon to the consolidated institution, with a salary of 100 pagodas a month.

CHAPTER XVIII

Madras Adopts European Medicine

POPULARITY OF NEW MEDICINE

Many instances are available in the 17th century records to show that Indian Princes and Governors of Provinces frequently requested the English for the loan of their Medical Officers to effect cures on themselves or their followers. As far as one can trace, the earliest reference in the records of Fort St. George occurs in the year 1694. Dr. Samuel Brown originally a ship surgeon, then acting as the second surgeon of the hospital at Fort St. George, was sent at the request of Nawab Khasim Khan to treat the wounded Nawab. Having completed the cure, Dr. Brown returned to Madras after many months bringing with him a letter from the Nawab to the President. The Nawab also sent through the Doctor as a present to the President a Persian horse worth 1000 Pagodas. In the early part of the next century, Dr. Andrew Munro was sent to treat Bakr Ali Khan at Vellore.

Officers of the Nawab suffering from Distempers or dangerous wounds also began to come to Madras, with all their retinue for expert medical aid of the English Surgeons. When these distinguished sojourners applied for the services of a Doctor, the President " assured that the best Doctor of the place should attend on them."

Even private individuals of affluence, like " a great Moorman " came to the town for the services of a British Physician in 1686. Grosse, who reached India in 1750,

indicates the growing popularity of the European Physicians in India in his book "Voyage to the East Indies." "Their (Indian) Physicians are not in so great esteem as those of the Missions. The great people in India never fail when they can have a European Physician to prefer him to their own."

Even the French officials, from Pondichery, came to Madras for treatment. It is recorded in 1703, that Mons. De Chelonge, second at Pondicherry, "having laid sometimes ill of a consumption, came to St. Thomas Mount two days ago in hopes the change of air would do him good but being so far out of town and requiring very often attendance of the Doctor, desired leave of the Governor that he might come to Mons. Chardin's Gardens which he readily granted to him and this evening he arrived."

The Doctors of the Hospital began to attend on the sick and wounded among the native population of Madras. The Doctors of the Hospital also seem to have attended on some accident cases from town. Gode Ankennah represented to the Governor on 16-11-1724 that "he was called out by some persons who gave several wounds on his belly, and his breast and thinking that they had killed him, left him on the road." The Governor ordered Doctor Pitchier to dress the wounds of this man. The Doctor stated that if he "had stayed but four hours longer without a Doctor he would have been a dead man."

By the middle of the 18th century, the Company began to insist on proper care of the native employees,

and even the so called "slaves," who were asked to be looked after, when sick, by the Surgeons, just like the Military.

In May 1677, when Shivaji descended on the Coromandal Coast with his Maharatta hosts and reached a place 2½ leagues from Fort St. George, the Maharatta ruler sent a letter to the English at Fort St. George "requesting some cordiall, stones and counter poisons." The Council ordered these to be sent as presents. The records refer to a list of medicines and their cost. Again, in a consultation dated June, 1677, it is noted that Shivaji asked for "some more cordialls and counter-poisons for cost." This time also, the Council at Fort St. George, sent the desired articles as presents. The total value of these medicines is given as Pag. 52/-.

SOME EARLY PRIVATE PRACTITIONERS

The earliest type of the private practitioners in Madras came from the rank of the Company's Surgeons themselves who were permitted private practice. When any of the Company's Surgeons were discharged from service for any reason, they naturally fell back upon private practice in the growing city, where there were no English medical practitioners and settled there temporarily or permanently. Robert Cooper who is shown as Surgeon in the lists of persons at Fort St. George for the year 1657/58 and again in 1663 settled down in Madras the year after his discharge from Company's service. According to list of Burials at

Madras, Robert Cooper, Surgeon, was buried on 21-7-1690 which indicates that the ex-employee of the Company must have been in active practice even in his old age. Doctor Samuel Hart appointed Surgeon of the Fort St. George in 1688/89 was discharged in 1692 on the arrival of Dr. Bulkley from England as Company's Surgeon at Madras. Hart continued to live at Madras for many years as his name occurs in the list of inhabitants (not Company's servants) up to 1707. He seems to have had many adventures in matrimony, Blackwall who was for some time Surgeon at Fort St. David and had treated Nawab of Carnatic professionally, was allowed to settle down at Madras after his release from prison in 1695. He lived at Madras as attorney in the Mayor's Court. The fact that he was appointed again as Surgeon to the west coast in 1696/97 as a reward for his good behaviour since 1694 may be taken as an indication that he must have been popular and successful as a practitioner during his stay in Madras. Dr. Samuel Brown rejected the offered post in Bengal, when he was discharged from the Fort St. George establishment in 1698, as he was engaged in private practice in the city. He seems, from the records, to have been a very successful and popular Physician. To his credit, it may also be added that he was a great collector of 'Botanical specimens' now housed in British Museum. He is also perhaps the earliest of the Company's Doctors at Madras whose journal of case-records is available to us in the manuscript department of the British Museum. A copy of this Journal

secured before the war is still awaiting publication in India.

There are many instances of ship surgeons and surgeons' mates at Madras getting their discharge with an idea to private practice. There are other cases, where people trained as Surgeons and Apothecaries came to India, as soldiers and then changed over to take up the practice of medicine. A few soldiers, who were helping doctors, gradually acquired a liking for the profession and worked as apprentices and ultimately submitted their certificate to get appointed as Surgeons or to get discharged from the Army with a view to settle down in practice. In 1729, James Robson obtained discharge from the Garrison with a view to practise medicine, a profession for which he had been trained. The Surgeons who came from England for employment in the Company's service when vacancies arise, had to wait for sometime at Madras before getting a posting. They also might have practised for a while in Madras. Anthony Supplie, orginally employed by the "New Company" as Surgeon at Machilipatam was a free man of Forst St. George about 1705, when a vacancy arose at Fort St. David. As Dr. Brown who was promised this vacancy was no more, it was filled up by Dr. Supplie, who later became a Surgeon of Fort St. George in 1711.

In the middle of the 18th century, medical men sought permission of the Company in England to reside in India as Surgeons. In 1759, John Page was allowed to reside as Surgeon in India. There were also many Surgeons temporarily entertained to be in charge of the

various Garrisons and Regiments in active service in south India. These were latter thrown out of employment for some periods and were probably forced to depend on private practice till they were re-entertained as occasions arose. Private practice was not even then the monopoly of the Company's Surgeons nor were the early private medical practitioners of the 17th and 18th centuries limited to any one European nationality, though the Britishers formed the largest group. About the year 1678, there was living in Black Town a French Medical Practitioner, called Francisco Cutineth. He treated John Ballance, a private soldier wounded by Corporal Law. When Ballance died, the Council of Fort St. George called this French surgeon to give evidence about the case in the presence of the Company's Surgeon, Bazaliel Sherman. Franciso declared "he verily believed that Ballance dyed of those blows and bruises he received."

The increasing popularity of European Medicine and the prospects of earning a good fortune must have been a sufficient attraction to some of the European inhabitants to become apprentices and to learn the practice of the profession. Allusions occur about the year 1716, to a "Dr. Thomas, son-in-law of Rev. Lewis," who took an active part in the socio-religious movement and the uplift of the backward classes of Madras. Again, another doctor, "Pariera, the one-eyed doctor" of Madras is mentioned in the proceedings of 1720. Nearly a quarter of a century later, during the negotiations for the surrender of Madras on the 9th

of September 1746, a Eurasian named Francisco Pariera who practised medicine for many years at Arcot, is mentioned as the bearer of a massage from the English Governor in the Fort to the French Commander at San Thome.

NICHOLAS MANUCHI

The most romantic career of all the medical men in Madras during the last part of the 17th century was that of the Italian adventurer, Nicholas Manuchi, whose name was commemorated in the city of Madras by the old familiar land mark—" Manuchi's House and garden " so frequently mentioned in the records of the early half of the 18th century.

Manuchi left Venice in 1653 when he was a lad of 14 and after many adventures in Persia reached Surat in 1656. He first enlisted himself as an artillary man in the service of Prince Dara, eldest son of Shah Jehan.

After some adventures in Eastern India, he returned once more to Delhi, the centre of Moghul splendour and adopted medicine as a profession and spent his time alternately at Agra and Delhi.

Manuchi moved later to Lahore and started practice as a Physician about 1670-71. His book mentions numerous interesting cases treated by him at that period. After 6 or 7 years, he seems to have realised a competence.

The little fortune he earned by medical practice was soon lost by his tactless speculaction. Manuchi was

once more obliged to try his fortunes at the Moghul Court. He returned to Delhi in 1678. Fortune favoured him. Through the good offices of a Court Chamberlain, Manuchi was called in to attend one of the wives of Shah Alam and successfully relieved the princely patient of her ear trouble. This good lady began to take a kindly interest in the fortunes of the foreigner and secured for him an appointment as one of the Physicians of Prince Shah Alam. When Shah Alam was made Governor of Deccan, Manuchi followed him and remained with him till 1682.

The Italian Physician of the Moghul Court and the private practitioner of Lahore, came to Madras as a refugee in the English settlement of Fort St. George, where he again began to practise as a Physician and act occasionally as a diplomat in conducting negotiations or leading embassies on behalf of the English at Madras to the Court of the Moghul or the Provincial Governors. Fort St. George records describe him as "Senior Nichola Manuchi, formerly physician for many years to King Shah Alam, who was sent by the Council (of Fort St. George) to Surat and Delhi on Company's business, to secure favourable terms—". Manuchi was primarily a self-educated man, shrewd, observant, full of mother wit. A good deal of his success both in his profession and his diplomatic career, was due to his persuasive talk and ready tongue. As William Irvine aptly points out, Manuchi's knowledge must have been limited but evidently sufficient to secure him some professional reputation, on the principle that "among the blind, the

one-eyed man is king!" Manuchi chiefly relied on bleeding, purging, and actual cautery. He patented and sold, what were known as Manuchi's stones, in imitation of the Goa stones of Portuguese Jesuits. He also made a little income by advertising and selling a "Cordiall", probably intended as an aphrodisiac. "But knowing what we do, of the Healing Art in Italy, France and England in the 17th century, he (Manuchi) does not seem to have been so very much behind his European contemporaries." (Irvine)

EUROPEAN SURGEONS IN THE SERVICE OF ORIENTAL POTENTATES

A number of European Surgeons and Physicians sought and found employment at the courts of various Indian Rulers or as personal Physicians to the Princes of India. These pioneers—the torch-bearers of Modern Medicine—represented almost all important nations of Europe, Portugueese and Dutch, British and French, German and Italian. European visitors to India in the 17th and 18th centuries allude frequently to the presence of such Surgeons and Apothecaries in the different kingdoms and cities of India. Col. Crawford gives a long list culled from various original records. Brief biogrophical notes of a few European Pysicians in and around Madras or of those connected in some way or other, with the fortunes of Fort St. George may not be considered out of place here.

Monsier D'Estreman was Surgeon to the king of Golconda about the year 1684. A consultation of that

year records that this Surgeon was asked to help the English in procuring a *firman* permitting them to coin rupees and that he promised to do his best to help them. According to Manuchi, this court Physician of Golconda died in 1684.

A Consultation of 1693, alludes to the Physician to the Nawab of Carnatic. The name of this Physician, Johannes Polutiat, may indicate an Armenian nationality.

Jean Baptiste de St. Hilaire, was Physician to Bakr Ali Khan, Governor of Vellore about 1716. In the correspondence for 1723 Mons. St. Hilaire, the doctor, is noted as bringing proposals for some negotiations from Nawab Sadatulla Khan to the Governor of Madras and taking back the answer the same night. It is said that this physician later migrated to Madras.

Dr. Gordon, mentioned in the Records of 1740, was Surgeon to Mahfuz Khan, eldest son of Nawab of Arcot. In the later records of 1748, he is frequently mentioned as also conducting negotiations relating to the affairs of East India Company in South India.

A NAWAB'S MEDICAL ATTENDANTS

But, to Nawab Mahammad Ali (Nawab Walajah) Nawab of Arcot, (or Nawab of Carnatic) belongs the unique distinction of having retained in his employ many European Surgeons at the same time, the actual number of personal doctors varying from time to time. He succeeded in 1749, as titular Nawab of Arcot. One of the earliest Surgeons patronised by this Nawab was

Alexander Boswell, a Surgeon of the Company whose services were first lent by the Council of Fort St. George about the year 1754.

About 1771, the Nawab had in his service two surgeons, Boswell and Mr. Storey. Records of 1773-75 indicate that the Nawab's surgeon's at that time were Robert Storey, Job Bulman, Robert Smith Baird.

Col. Love adds a footnote that the Nawob liked variety in medical advisers. In 1778 he had eight doctors in his service *viz.*, two physicians and six surgeons. The former were Messrs. de Maloa, father and son; the latter were Drs. Robert Storey and Job Bulman, residing on Choultry Plain, Dr. Robert Baird Dr. Weston, of San Thome, Dr. James Dott, of the Luz, and Dr. Plott who was then 'a Debtor in the Goal.'

INDIGENOUS ASSISTANTS TRAINED IN EUROPEAN MEDICINE

A new class, a lower grade of medical men locally trained in the Madras Hospital gradually came into existence. Mention has been made of instances when soldiers who were helping in the Hospital, gradually learnt to act as surgeon's mates or apothecaries. Some medical officers trained soldiers and half-castes to assist them in hospital work or even in their private cases.

Indigenous assistants in the hospital were employed even from the early days of East India Company. "These assistants were, at first, native servants trained locally to act as dressers, under the immediate supervision of superiors." As early as 1690, there was an

Indian Doctor, Shevandavadem, in Company's service at Fort St. David. He was getting 2 Pagodas a month and his son, Namashiva, who was acting as assistant, one Pagoda a month. Namashiva, later became Physican and when he retired in 1750, after nearly 50 years of service, requested that his son might be appointed as Physican. These Indian Physicans in Compay's service later came to be known as Native Dressers in Madras and as Black Doctors in Bengal and are believed to correspond to the class of Sub-Assistant Surgeons of the present day. There was, about 1740, at Fort Marlborough a black doctor attending on slaves, *i.e.*, natives employed by the Company. By the middle of the 18th century, some of the Indian understudies of the Company's Doctors at Madras were deemed to be good enough to be sent, as Medical Experts, to attend on some generals or Governors of the Nawab of Karnatic.

NATIVE DOCTORS (DRESSERS) IN THE ARMY

It was about the year 1767 that the Government sanctioned the appointment of a Native Doctor to each Sepoy Battalion on the pay of 3 pags. a month.

In the year 1806, there was a change in the posting and pay of Dressers. "The stoppages formerly made from the pay of the sepoys for supplying them with medical aid and country medicines were discontinued on the 1st January 1806, and the Native Dressers were ordered to be received on the strength of the corps to which they had been attached, and to be regularly paid by Government at the rate of ten pagodas each per

mensum. One Dresser was allowed to each regiment of native cavalry, and two to each battalion of native infantry." In 1813, two Native Dressers were allowed for every battalion, *viz.*, one First Dresser on 10 pagodas and one Second Dresser on 7 pagodas per mensem.

About the year 1818, the following order regarding the Second Dressers of the native infantry was published. "The Commander-in-Chief directs that officers commanding corps will at all times consider it their duty to keep the Second Dressers of regiments and battalions complete by entertaining natives of caste and respectability. It is of essential consequence to the comfort of native troops and their families that the Second Dresser of a corps should not only be a man of respectable caste and character, but that he should be well qualified to give medical aid to the followers and families of a corps. The Commander-in-Chief therefore directs that previously to any such person being enrolled on the strength of a corps, he is examined by the medical officer in charge of it, and if found qualified in every respect, the medical officer will report the same to the officer commanding the corps, who, on such written certificate, will entertain the candidate and place him on the strength of the corps."

EPILOGUE

THE DAWN OF MODERN MEDICINE

(The foundation of Madras Medical School in 1835)

The first quarter of the 19th century witnessed the organisation of special hospitals in the City. A hospital for lepers was completed in 1816, and it developed into the Government Leper Hospital. The Madras Eye Infirmary was opened in 1819, and was first located in Rundalls Road, Vepery. It is, however, the foundation of the Medical School that can be rightly described as the Dawn of Modern Medicine in Madras.

The Madras Medical School, the forerunner of the College was opened by the Rt. Hon'ble Sir Frederick Adams (the Governor of Madras) on the last day of June, 1835, in spite of opposition from the Medical Board. The object of the Government, in establishing the first institution of this kind in South India, was a modest one, namely, "affording better means of instruction in Medicine and Surgery to the Indo-British and native youths, entering the medical branch of the service under this Presidency." The foundation of the school was an epoch in the annals of the department and the effects were soon realised. " It raised the status of the subordinate to such a height that there was no comparison between the man who passed through its portals and his predecessor who had not this advantage. One was a Professional man with a professional training that gave him the means to earn a livelihood in any civilised community while the other was a mere hospital

attendant, with a training just sufficient to carry out the mechanical duties of the ward."

The curriculum embraced Anatomy and Materia Medica for the first year, Medicine and Surgery for the second year. The School began with ten European medical apprentices and eleven native medical pupils. The teaching staff consisted of Surgeon Mortimer M. D. as Superintendent of the Medical School and Assistant Surgeon George Harding, as Assistant Superintendent, with two Assistants, a Warrant Officer, Assistant Apothecary D'Beaux and a Dresser, P. S. Muthuswamy Mudaliar. The Superintendent and his assistant were "men of exceptional ability and merit".

Many changes were effected during the next two decades. The teaching staff was increased, the duration of the course was extended and the curriculum was made comprehensive. A senior course extending over five years was opened and private pupils were also admitted into the school. In the early part of 1850, the School Council submitted a proposal to Government to accord to this institution the higher designation of "College", remarking that this change in the designation of the institution would add to its professional status. From the 1st October, 1850, the institution has been known as the Madras Medical College. The first batch of students who went through the senior course successfully passed out in 1852 and were granted the diploma of the Graduate of Madras Medical College. The College continued to grant the diploma till 1863, when the College became affiliated to the Madras University which then commenced to award medical degrees.

From small beginnings in the 17th century have grown up the magnificent institutions, hospitals, colleges, and laboratories. Organised and staffed only by British Surgeons for the benefit of British Soldiers at first, the hospitals are now run by the Alumnii of these institutions and afford succour to all people, irrespective of colour, creed or caste. The Superintendents of the city hospitals, the Principals of Medical Colleges, the heads of the Provincial Medical Department are eminent members of the Indian Medical Profession. One of the former presidents of the Indian Medical Association is the Director-General of Health Services of the Dominion of India.

The Indian Medical men and women have distinguished themselves not only on all the battle fronts of the Great War but have also played a prominent part in the fight for freedom of India. The medical politicians found a seat on the Working Committee of the Congress. A medical man was also elected as the President of the Indian National Congress. Medical men have been Ministers and Premiers in Provinces. A Physician is to be Governor of a Province. Medical men have also adorned, with distinction, the high office of Vice-Chancellors of the premier universities of India. Indian doctors have done research. Two have been elected Presidents of the Indian Science Congress. The amazing vitality and versatility of the Medical Profession in India today are the highest tributes to the British teachers and their Indian disciples.

India had a highly developed civilization long before the rise of Greek Medicine. The older civilization of India might have contributed books and knowledge to the later schools of Greece and Alexandria. Indian medical classics taken to the courts of the Kaliphs and translated into Arabic, were studied and quoted as authorities by the great masters of Arab Medicine like Rhazes and Avicenna, whose works became textbooks, in the medical schools of Europe.

The little Hindu infant, left an orphan, due to the political turmoil in India, was taken and nursed by the Arab Patrons of Science. Some Nestorian monks took the child to European Monasteries and Universities. There, due to Time spirit, the child grew into a woman. European Traders brought her back to the native land. She may have the aristocratic habits of Memsahibs and don European modes of dress. Let us teach her Indian traditions, languages, customs and simplicity.

Magendie said " Medicine is Science in the making " and Claude Bernard declared " In science, the thing is to modify and change one's ideas as Science advances ". Pastuer, the greatest benefactor of Mankind, wisely observed, " Science has no country." Medicine, too, transcends all boundaries, national or racial. It is neither Occidental nor Oriental; it is global and indivisible.

PRINTED AT THE B. N. K. PRESS, MADRAS,
Q. H, NO MS. 100/B FOR D. DIS. P. CON. A. 1074/-11-47.

SELECTED BIBLIOGRAPHY

(A) Official Records of Fort St. George

Diary and Consultation Books.

Factory Records,

Letters from Fort St. George.

Letters to Fort St. George.

Military Consultations.

Public Consultations.

Public Despatches from England.

(B) Books

CRAWFORD, Lt. Colonel D.G., A History of the Indian Medical Service, Thacker and Co., London, 1914.

FOSTER, W. English Factories in India, Oxford, 1906-1913.

GUIDE TO MADRAS, Higginbothams, Madras 1881.

KEESS, J. History of Madras Medical College and Hospital, Madras, 1885.

LOVE, Col. Henry Davison, Vestiges of Old Madras, Indian Records Series, London, 1913.

MANUCCI, Niccolo, Storia do Mogor or Mogul India (Indian Texts Series), Edited by William Irvine, London 1907–1908.

PENNY, Rev. F., On the Coromandal Coast.

SREENIVASACHARI, C. S. History of The City of Madras. Varadachary & Co., Madras, 1939.

WILSON, Col. W. J., History of Madras Army, 4 vols., Madras, 1882–1888.

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